BANCA NAZIONALE DEL LAVORO
QUARTERLY REVIEW

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January-March

ROME

1953

BANCA NAZIONALE DEL LAVORO

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Condensed Statement of Condition, March, 31, 1953

ASSETS	(Lire)	LIABILITIES	
Cash, Balances with Banks & Money at call	113,816,999,707	Capital	1,150,000,000
Investments: Govt. & semi-Govt. Securities & Treasury Bills	62,091,733,970	Ordinary Reserve Fund	3,350,000,000
Investments: Other Securities	5,347,347,264		4,500,000,000
Contango, Advances on Securities & Loans	187,718,495,090	Deposits & Current Accounts (Including Balance of Profit & Loss)	400,260,831,306
Bills receivable	94,476,424,671	Cheques in Circulation (*assegni circolari*)	16,187,146,075
Sundry Accounts	1,994,898,750	Bills for collection	17,493,632,055
Premises, Furnitures & Fixtures	1	Guarantees & Acceptances for A/C of Customers	55,348,375,896
Customers' Liability for Guarantees & Acceptances	55,348,375,896	Sundry Accounts	16,088,381,740
		Staff individual Retirement Accounts	8,654,243,864
		Unearned Discount & other unearned Income	2,261,664,413
	520,794,275,349		520,794,275,349
Securities deposited by Third Parties	109,804,262,961	Depositors of Securities	109,804,262,961
Special guaranteed Accounts	11,652,562	Accounts guaranteeing special Accounts	11,652,562
Staff Assistance & Retirement Fund — Securities deposited by the Bank as Guarantee	8,969,980,605	Bank's Securities guaranteeing Staff Assistance & Retirement Fund	8,969,980,605
	639,580,171,477		639,580,171,477

AUTONOMOUS SECTIONS FOR SPECIAL CREDITS

SECTION FOR CREDIT TO MEDIUM AND MINOR INDUSTRIES

Capital, Reserves and Government Guarantee Fund L. 2,551,775,000

SECTION FOR HOTEL AND TOURIST CREDIT

Aggregate Capital and Reserves L. 507,983,655

SECTION FOR CO-OPERATIVE CREDIT

Capital and Reserves L. 2,560,949,740 - Government Guarantee L. 2,000,000,000

SECTION FOR MORTGAGE CREDIT

Aggregate Capital and Reserves L. 667,224,573

SECTION FOR CINEMA CREDIT

Aggregate Capital and Reserves L. 642,998,117

BANCA NAZIONALE DEL LAVORO QUARTERLY REVIEW

Vol. VI, No. 24, January-March 1953

SUMMARY

The theories associated with the name of the late Lord Keynes, and of which it is sometimes claimed that the first seeds and some of the most important forerunners (Johannsen, the Hahn of earlier years, etc.) were to be found in Germany, had not until a few years ago aroused much interest among German economists, the great majority of whom, perhaps as a reaction to a long period of « economic planning », had quickly rejected them.

Subsequently, a tendency towards a modification of this position appeared, and in the second half of 1950 a meeting was held to discuss the problems of full employment, the declared purpose being to direct the attention of scholars and of government circles in Western Germany to the « new » doctrines. The introductory report, « Die Problematik der Vollbeschäftigung », drawn up by Prof. Erich Schneider, is not only a vigorous reappraisal of the ideas of Keynes, but concludes with a careful appreciation of their practical applications.

In the article published here under the title « *Fundamental Errors in Recent Anti-Keynesian Literature* », Prof. Erich Schneider reexamines the subject of Keynesian doctrines as treated by German writers, and in reviewing the discussions that have taken place, he subjects to close criticism the anti-Keynesian positions taken by some of the leading German economists, more especially Weber, Roepke and Hahn. Prof. Schneider's article thus offers an exhaustive picture of the present state of such discussions in Germany and in the German literature, besides giving us his own synthesis of the nature and importance of the contribution to economic theory made by Keynes.

* * *

The article by Prof. Montgomery D. Anderson analyses, in mathematical terms, « *The Relationship of Savings to Some Important Variables in the Business Cycle* ». Referring back to the line of thought developed in his book « *Total Business Fluctuations* » (Gainesville, Kallman, 1949), the Author criticises the common sense definition of « cash savings » and « goods savings », and proposes and discusses an alternative definition, which, in his opinion, offers decisive advantages for purposes of analysing the trade cycle and the savings process.

* * *

The article entitled « *The Minister of the Treasury's Survey of the Italian Economic Situation in 1952* » summarises the principal statistics relating to national income, consumption and investment in Italy over the last three years as given in Signor Pella's latest (fourth) Annual Report supplemented by that for the previous year. It also reproduces from the same source the balance of payments statistics for the last two years as they result from the receipts and payments of foreign exchange registered by the Italian Foreign Exchange Office.

Two aspects of Italian economic developments in 1952 stand out from the present Report. The first is the decline in the rate of expansion of production and investment as compared with previous years. The second is the serious deterioration in Italy's balance of payments position, reflected especially in the reversal of the movement of her balances with the European Payments Union.

* * *

« *The Crisis in the Italian Balance of Trade* » is examined by Prof. Giulio Pietranera in an article which discusses the chief factors leading to the heavy deficit of 1951-52. These are: the world textile crisis; the restrictions placed by other countries on imports from Italy; Italian trade liberalisation measures and the policy of expanding imports in order to facilitate the domestic development programme aimed especially at improving conditions in Southern Italy; the absence of an « export policy » corresponding to the special measures adopted by other countries in favour of their exporters.

In spite of the deterioration of the situation in 1952, the relevant authorities in Italy have not yet thought it advisable or follow other countries in the direction of export drives and import restrictions. Italy's special economic conditions and her dependence on effective international cooperation make it advisable for her to direct her commercial policy along orthodox lines, continuing to support trade liberalisation and to resist the trend towards import restrictions. Only if other countries were to continue restricting imports, while increasing aids to exports, would Italy perhaps be obliged to abandon her present policies.

The Italian trade crisis thus resolves itself into a problem of international co-operation, which alone can meet the fundamental needs of the Italian economy, suffering as it does from a structural disequilibrium between natural resources and population. Unfortunately, international cooperation, however generous it has been in the field of economic aid, has until now been disappointing in other directions of special importance for Italy, such as emigration; the more serious therefore would be a failure in the field of international trade.

* * *

The first stage of the Enquiry into Unemployment in Italy sponsored and carried out by an *ad hoc* Parliamentary Committee, was completed at the end of March, 1953. The Committee undertook a series of investigations concerning all the aspects of the many-sided phenomenon, the results of which have been brought together in 15 volumes of « Proceedings » now being published. The most important investigations are the four fundamental statistical enquiries into: the *labour force* (carried out on a sample basis by the Central Institute of Statistics); the *registrations at the Labour Exchanges* (made by the Ministry of Labour); *under-employment in agriculture* (made by the National Institute of Agrarian Economy); and *labour turnover* (made by the Institute for Economic Studies). These enquiries complete one another, and make it possible for the first time to ascertain, even if still only approximately, the measure, the limits and the principal characteristics of unemployment and of the labour market in Italy. The fundamental aspects of the four enquiries have been summed up and discussed by Dr. Giorgio Ruffolo, in the article entitled « *The Parliamentary Enquiry into Unemployment in Italy* ». The main conclusions reached are summarized on page 73.

* * *

In « *Rationalisation of Banking Services at an International Level* » (*A letter from a banker*), an Italian banker calls attention to the drawbacks from the lack of co-ordination and of uniformity in the attempts at rationalisation now being made by the banks of various countries, and urges the advisability of co-ordinated action at an international level.

The Banca Nazionale del Lavoro assumes no responsibility for opinions or facts stated by authors whose contributions are published in the present Review.

All communications regarding the Review should be addressed to Banca Nazionale del Lavoro, Ufficio Studi, Roma, Via Vittorio Veneto, 119.

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Fundamental Errors in Recent Anti-Keynesian Literature

by

ERICH SCHNEIDER

I.

It is now nearly twenty years since the appearance of Keynes' General Theory of Employment, Interest and Money (1), and this work has now, by the overwhelming majority of economists, been digested and, in many ways, developed. A number of recent publications, show, however, that here and there important misunderstandings are still current with regard to the content and range of Keynes' contribution to economic theory. These misunderstandings are even to be found in the writings of some recognised economists (2), one of whom even goes so far as to formulate the conditions for a « peace formula » between Keynesians and anti-Keynesians! (3). It is therefore essential for us to face up to these misunderstandings, even if we have to discuss matters which for most economists have long ceased to be controversial. The smooth advance of our subject is constantly being obstructed, and a final clarification has become a pressing necessity (4).

II.

Let us begin with the proposition that the world of economists is today divided into the two hostile camps of « Keynesians » and « anti-Keynesians » (5), or into the representatives of the « New Economics » and the « Old Economics » (6). The inexpert reader who comes across this thesis inevitably must get the impression that these « Old » and « New » Economics are based on articles of faith which can be accepted or rejected according to taste or inclination, and not on scientific theorems which must be regarded as either true or false by anyone capable of logical reasoning. It is again from the same point of view that it is argued that what Keynes contributed was neither a revolution in thought nor a scientific achievement (7), but a « General Confu-

(1) London, 1936.

(2) I am concerned especially with the following writings:

(a) H. Mayer, *John Maynard Keynes' « Neubegründung » der Wirtschaftstheorie*, in « Lagler-Messner, Wirtschaftliche Entwicklung und soziale Ordnung », Vienna, 1952. This work is an extract from a lecture delivered at Bad Ischl in August 1951, of which a verbatim report has unfortunately not yet appeared. A very brief report has been given by H. Rittershausen in the « Frankfurter Allgemeine Zeitung » of 20.9.1951, entitled *Keynes weder Revolution noch Wissenschaft.*

(b) W. Röpke, *Civitas Humana, Grundfragen der Gesellschafts- und Wirtschaftsreform*, Erlenbach - Zürich, 1944, p. 333 ff.

(c) W. Röpke, *Was lehrt Keynes?*, in « Frankfurter Allgemeine Zeitung » of 27.9.1952.

(d) A. Weber, *Lord Keynes auf neuen Wegen: Der Kredit als Zaubermittel?*, in « Hauptfragen der Wirtschaftspolitik », Berlin, 1950.

(e) A. Weber: *New Economics - Revolution oder Konfusion?*, in « Zeitschrift für das gesamte Kreditwesen », 1952.

(f) A. L. Hahn, *The Economics of Illusion*, New York, 1947. A detailed criticism of this book is given in my article *Hahn Contra Keynes* (« Schweizerische Zeitschrift für Volkswirtschaft und Statistik », 1952, p. 395 ff.).

(g) A. L. Hahn, *Die Grundirrtümer in Lord Keynes' General Theory of Employment, Interest and Money*, in « Ordo », Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, Vol. II, 1949.

(h) A. Hunold (editor), *Vollbeschäftigung, Inflation und Planwirtschaft*, Zürich, 1951.

(3) W. Röpke, *Was lehrt Keynes?*, in « Frankfurter Allgemeine Zeitung », 27.9.1952.

(4) The complete confusion as to the meaning of Keynes' theory is shown very clearly in the book mentioned above on « Vollbeschäftigung, Inflation und Planwirtschaft ». The editor aimed at publishing a counterblast to Keynes. But he has obviously failed to notice that the article contributed by Lutz, one of the best and most important in the volume, not only in no way contradicts, but is in full agreement with Keynes' theory.

(5) H. Mayer, *op. cit.*

(6) W. Röpke, *Was lehrt Keynes?*

(7) See the report by H. Rittershausen of Mayer's lecture mentioned in note (2) above.

sion » (8). Now even the most superficial reader of the General Theory must know that Keynes did not offer the reader a « Weltanschauung » but a *theory*. The book is entitled « General *Theory* of Employment, Interest and Money », and Keynes describes the question which he intended his theory to answer as follows: « Our present object is to discover what determines at any time the national income of a given economic system and... the amount of its employment » (9). It is to be noticed that Keynes states his objective as being a theory of *employment*, not as has so often wrongly been said — of a theory of *full* employment (10).

The questions we have to ask are: (a) whether Keynes' theory is true or false; (b) whether the theorems developed by Keynes invalidate our previous knowledge or only extend it; and (c) what are the consequences for economic policy which follow from Keynes' theoretical propositions, assuming that these are correct. It is soon clear that questions (a) and (b) can never divide the world of economists into two hostile camps. Anyone maintaining the opposite has never understood the nature of theoretical propositions and theoretical reasoning, and should read W. Eucken's distinguished essay on the use of Economic Theory (11), (*Was leistet die ökonomische Theorie?*). Theoretical propositions are always conditional in the form « If A, then B ». *If* these or those postulates are satisfied, *then* these or those relationships are valid. « Theory » as Lotze said, « is not concerned with what *is* and what *happens*, but tells us what *must* be and what *must* happen *if* particular conditions are satisfied » (12). Theoretical propositions always possess analytical necessity and, under the assumption made, are always either true or false (13). One cannot therefore accept or reject a theoretical proposition as one may a dogma. One can simply say that a correctly-reasoned theoretical proposition may not be *relevant* at any particular moment because the assumptions from which it is deduced do not coincide with the existing situation (14). This does not mean that the proposition is false, but simply that the proposition, though true, is not relevant. The propositions of the theory of oligopoly are obviously not relevant when conditions of oligopoly do not exist. Nevertheless, they always remain true. Our theoretical tool-boxes consist of logically necessary propositions, only a part of which are relevant at any particular moment.

W. Röpke does not agree with this point of view. Quoting in support J.M. Clark, he argues that « the Keynesian revolution has split political economy into two realms of logic. What is sense in one realm is nonsense in the other » (15). It is true that one of the most important achievements of Keynes consists in the demonstration that for an economy in a condition of full employment different theorems hold good than in an economy with under-employment. Röpke admits this and adds that the mass unemployment of the 30's could not be explained by « the Old Economics », that is, by means of theorems deduced under the assumption of full employment: « In this case a deficiency of "effective demand" was the true cause of mass unemployment which it was the duty of economic policy to remove, and which called for a reversal of sound eco-

(8) A. Hahn, *op. cit.*; H. Mayer, *op. cit.*

(9) J. M. Keynes, *General Theory*, etc., p. 247.

(10) Strictly one can only speak of a theory of full employment *policy*. As Keynes was concerned with the means or policies by which full employment could be attained he could be described as having worked out a theory of employment *and* of full employment policy.

(11) W. Eucken, *Kapitaltheoretische Untersuchungen*, Jena, 1934.

(12) W. Eucken, *op. cit.*

(13) All too truly it may be said that « we are continually discussing theory in our subject without the faintest grasp of its logical character » (W. Eucken, *op. cit.*, p. 29).

(14) Only in this way can any sense be discovered in the strange notion advanced by some writers that Keynes' theory applies only to England and is not applicable to the present German situation (*e.g.* A. Weber). Whether such statements are correct will have to be considered later.

(15) W. Röpke, *Was lehrt Keynes?*

The statement of J. M. Clark to which Röpke refers runs as follows: « For conventional economics the effect of the Keynesian propositions is startling. Its one world *seems* (italics added) to be split into two realms of logic, and the sense of one is the nonsense of the other » (J. M. Clark, *Alternative to Serfdom*, New York, 1948, p. 106). Clark shows by means of some impressive examples that for a world of under-employment different propositions are valid than for a world of full employment. He adds: « The Keynesian formula is a striking antithesis to orthodoxy, where just such a striking antithesis was needed to break through the crust of outworn ideas. It remains for the next generation to fashion a synthesis, both in theory and in policy » (*op. cit.*, pp. 109-110). We recommend especially Chapter IV of Clark's book: *Revolution in Economics: After Keynes What?*

nomic thinking (16), and the laying of the main emphasis on expenditure and on "increasing effective demand". It was then the economist's duty to refuse to be frightened by the danger of inflation and not to wait upon previous supplies of saving » (17). Röpke agrees also that there may be cases where an increase in the national debt represents a lesser evil (18). But it is wrong to believe that a different sort of logic operates in the theory of the under-employed economy from that which operates in the theory of the fully-employed economy. The logic is the same in the two cases. It is simply the assumptions from which the theorems are deduced which are different. In Euclidian geometry different propositions are valid than in non-Euclidian geometry, but the logic is the same in the two cases.

Keynes underlined with great precision the differences between a world with full employment and a wold with under-employment, and emphasised that the propositions valid in the one case lose their validity in the other. It is quite simply false when Röpke states that Keynes attributed general validity to relationships obtaining in a wold of under-employment. Theoretical propositions are always only valid under particular assumptions. Also any further conclusions drawn from these propositions are likewise tied to the original assumptions (19).

There is at most, in the realm of economic theory, *one* sense in which we can speak of « Keynesians » and « non-Keynesians ». The theory of employment developed by Keynes uses a special terminology which a majority of economists — but not all — today use. One could therefore describe those economists who reject the Keynesian terminology as « non-Keynesians ». But the number of these economists is getting smaller, and there is very little sense in employing this distinction in this way (20).

The case is different with regard to question (c). Here, a decision depends not on processes of logic but on the subjective inclinations, impressions and wishes of the individual. Here, but only here, can we really speak of a division between economists. Keynes himself has, as we shall examine later, drawn particular conclusions for economic policy from his theoretical propositions, in accordance with his own particular inclinations and values. These consequences, of course, have not got the character of logical necessity, and he himself simply regarded them as one particular *possibility*, as is clear from the title of Chapter XXIV of the General Theory: « Concluding Notes on the Social Philosophy towards which the General Theory *might* lead » (italics added). One may accept these conclusions and the economic policies they represent, or one can reject them. *In this sense* one may speak of « Keynesians », or « anti-Keynesians », but it must be noticed that this distinction only makes sense on the plane of economic policy and not on that of theoretical analysis. As I have said elsewhere (21), one must distinguish very precisely between Keynes' theoretical analysis and the consequences for economic policy drawn by Keynes. A rejecton of the latter does not imply a rejection of the former (22), as has often been forgotten in recent discussions. The antipathy with which Keynes' conclusions for economic policy are met is often carried over against Keynesian theory. As J.H. Williams has rightly said: « Few laymen could have known much about Ricardo's Theory of Value and Distribution, any more than most laymen today (who like to divide us all into "Keynesians » and "anti-Keynesians") have any understanding of the

(16) By « sound economic theory » Röpke obviously understands those theoretical propositions which are valid in conditions of full employment.

(17) W. Röpke, *Was lehrt Keynes?*

(18) W. Röpke, *op. cit.*

(19) « Keynes' work is built up... by a very subtle analysis which rests on carefully stated assumptions and which is valid only on these assumptions » (*Besinnung auf J. M. Keynes*, in « Die Zeit », 23.8.1951).

Keynes' theory « is a purely logical contrivance, which proceeds from certain assumed relationships to conclusions which inexorably follow so long as the assumptions are maintained inviolate » (J. H. Williams, *An Economist's Confessions*, in « American Economic Review », Vol. 42, 1952, p. 6).

(20) In spite of all his other objections, A. Hahn, in a lecture at Frankfurt, proposes that German economists should, in the interests of a better understanding, make use of the Keynesian terminology generally adopted in other countries. (See the report in the « Düsseldorf Handelsblatt » of 1.7.1949).

(21) *The Problems of Full Employment, Verhandlungen auf der Tagung des Vereins für Sozialpolitik in Bad Pyrmont*, 1950, Berlin, 1950, pp. 29-30.

(22) See also A. H. Hansen, *The Influence of Keynesian Thinking in the United States*, in « Weltwirtschaftliches Archiv », Vol. 69, No. 1.

Keynesian system, *but base their bias, for or against, solely on what they conceive to be the policy implications* » (23).

Recent German discussions provide many illustrations. The thesis that « Keynesism » is identical with « Inflationism » (Röpke), is one example of this kind of fallacious argument. This amounts to saying that to apply the propositions of Keynes' theory necessarily leads to an inflationary economic policy. Another illustration is the proposition that Keynes' theory leads directly to a centrally-controlled and centrally-administered economy. But it is absurd to suggest that a theoretical proposition provable by means of logical processes can necessarily lead to any particular measure of economic policy (24). As « The Economist » of 27/1/1951 has remarked: « His (Keynes') economic analysis did not arrive automatically at inflationary conclusions: it is a two-way street ». The propositions of Keynesian theory are, like other theoretical propositions, not tied to any political creed. As W. Fellner has rightly said, any one who supports a policy of direct controls with a reference to the General Theory « is reading between the lines, or at best is placing more emphasis on certain specific statements in the book than on others... It is possible to construct a highway from Keynesian analysis to certain varieties of socialism... Yet it must be emphasised that Keynes himself did not build this highway... It is possible also to construct a bridge from Keynesian analysis to policies of a very different sort, which are geared to the wage-price level as well as to the level of employment... To say that Keynes advocated a policy of this sort would be no less arbitrary than to say that he built a highway to socialism... The truth of the matter is that the Keynesian theory stops short of this dilemma » (25).

Keynes certainly recognized that involuntary unemployment is not only a disaster to those who suffer from it, but also that the future of the free market economy depends essentially on whether it is possible to stabilise employment at a high level within the framework of this economic system. This conviction is surely shared today by every intelligent and responsible supporter of the free market economy (26). But Keynes did not believe that involuntary unemployment can simply be abolished by bringing into being a competitive economic order, however precisely this may be functioning. Keynes would certainly have rejected completely propositions like the following, just because he was a liberal (27): « Let us establish a free and genuine competitive order internally and externally, and then the problem of employment will solve itself. It is the destruction of competition by monopoly and by the intervention of the state which betrays the market economy and causes unemployment » (28). There is simply no truth in Röpke's view that Keynes and his followers regarded as obsolete and irrelevant the workings of the price mechanism as a method of regulating the economy (29). But he knew that the price mechanism is not enough to ensure a relatively stable and high level of employment, even if the state were to establish a competitive economic order in which the formation of prices came about under free atomistic competition. He was, on the other hand, convinced that a policy of another kind, namely a combination of monetary and fiscal measures, was necessary in order to solve the

(23) J. H. Williams, *op. cit.*, p. 4 (italics added).

(24) Cf. for example, Röpke: « Practical experience has shown that it (Keynesian theory) has become one of the main pillars... of contemporary inflationary - collectivist policies ». (See Röpke, *Was lehrt Keynes?*). Hahn also argues: « The planner's basic attitude is distinctly an application of Keynes' General Theory » (*The Economics of Illusion*, New York, 1949).

(25) W. Fellner, *The Robertsonian Evolution*, in « American Economic Review », 1952, pp. 277-8.

(26) Per Jacobsson, for example, writes: « There can be no doubt that in future no economic system will be considered satisfactory which does not provide a fairly high level of employment ». (*Problems of Employment*, in « Vierteljahresberichte der Skandinaviska Banken », Vol. 33, No. 3, 1952).

(27) V. Muthesius, *Der Mythos der Keynesianismus*, in « Frankfurter Allgemeine Zeitung », 30.8.1952.

(28) Even Röpke admits: « In spite of all his criticisms of the capitalist system he never became a socialist, but always remained a liberal » (« Neue Zürcher Zeitung », 5.5.1946). Anyone who doubts that Keynes was anything but an ardent supporter of a free economic system should read his letter to Hayek concerning the latter's book *The Road to Serfdom*. (Printed in R. F. Harrod, *Life of J. M. Keynes*, London, 1950, pp. 436-7). Concerning this letter a writer in the Deutsche Zeitung remarked: « If those who oppose " interventionist " policies would learn to write about Keynesians as Keynes wrote about the opponents of " interventionism " it would be a great gain from the point of view of the climate in which economic policy is discussed ».

(29) W. Röpke, *Was lehrt Keynes?*

problem of employment in a market economy. He differed from other economists who favoured the free market economy simply in the measures which he supported to this end: « There are few economists today who favour unadulterated laisser-faire. But about the kind and degree of intervention there is endless debate » (30). It is at this point that opinions differ, and that the contrast between Keynesians and anti-Keynesians is justified. *But we cannot emphasise too strongly that the ends of economic policy as seen by Keynes were the same as those of Adam Smith and Eucken: the preserving and securing of the market economy* (31). We shall have more to say on this subject later.

III.

Let us turn now to the real achievement of Keynes, that is his discovery of the determinants of national income. His problem was, as we have already said, « to discover what determines at any time the national income of a given economic system and ... the amount of its employment ». He tells us precisely what he understands by « a given economic system »: « We take as given the existing skill and quantity of available labour, the existing quality and quantity of available equipment, the existing technique, the degree of competition, the tastes and habits of the consumer, the disutility of different intensities of labour and of the activities of supervision and organisation, as well as the social structure including the forces, other than our variables set forth below, which determine the distribution of the national income. This does not mean that we assume these factors to be constant; but merely that, in this place and context, we are not considering or taking into account the effects and consequences of changes in them » (32).

These assumptions which underlie the entire Keynesian model must be carefully observed. Many misunderstandings can be traced to a neglect of them. In particular, when we have carefully examined these assumptions it will be at once clear that the Keynesian theory is *a theory of « the short period »*, that is, a period in which net investment is so small in comparison with the initial stock of capital that only the income effect of investment is relevant, while the effect on productive capacity, that is, the fact that investment increases productive capacity, can be neglected. Keynes' construction can, therefore, explain the fluctuations of income and employment in the trade cycle, but not the long-term changes in the trend of income and employment. For this, other analysis is necessary which, as is well known, has been the subject of recent research. Anyone who has followed these developments will recognise that not only would they have been virtually impossible without the Keynesian theory, but that they directly build on that theory (33).

We must also notice that Keynesian analysis is limited to a closed economy without economic activity on the part of the State. The problems of the influence of the balance of payments and of the economic activity of the level of income and employment are treated in the General Theory. The discussion of these problems belongs to post-Keynesian development, which is again a direct continuation of Keynes' work. One only needs to compare the standard work on international trade of the year 1932 (G. Haberler, *International Trade*) with the latest account by J. E. Meade (*The*

(30) J. H. Williams, *op. cit.*

(31) « But with all the differences in method and construction in the economic thought of Eucken and that found in the theoretical work of Keynesians, the last lecture of the series which discusses the development of German economic thought in the twentieth century, convinces me that there is little real difference in the social philosophy of many Keynesians and that of the Euckenkreis » (A. T. Peacock, in « Weltwirtschaftliches Archiv », Vol. 68, 1952. The lecture by Eucken referred to above is the last in the volume *Our Unsuccessful Age, Five Lectures on Economic Policy*, London, 1951).

F. Neumark also rightly maintains: « It is a mistake only explicable on grounds of ignorance or blindness made by most opponents of these (*i.e.* Keynes' monetary and fiscal) policies, when they argue that the proponents of Keynesian policies are out for a sort of " cold socialisation ", or a revolutionary transformation of our most important economic and social institutions, even though this is only to take place by stages. In fact, the exact opposite is the case, for Keynesian policies are advocated as necessary because it is held that only by their means can we preserve what is worthy and capable of preservation in our existing institutions ». (*Grundsätze und Arten der Haushaltführung und Finanzbedarfdeckung*, in « Handbuch der Finanzwissenschaft », Vol. I, 1952, p. 657).

(32) J. M. Keynes, *op. cit.*, p. 245.

(33) A very instructive treatment of this subject is to be found in the article, shortly to appear in « Weltwirtschaftliches Archiv », by G. Bombach, *Zur Theorie des wirtschaftlichen Wachstums*.

Balance of Payments, London, 1950) in order to see what decisive advances have been made under Keynes' influence. As for public finance, one has only to compare any account of that subject from the year 1932 with, for example, that of F. Neumark (*Grundsätze und Arten der Haushaltführung und Finanzbedarfsdeckung*, in the new Handbuch der Finanzwissenschaft, Tübingen, 1952) in order to perceive the difference.

The reasoning which led Keynes to his solution of his problem is fundamentally simple. In a closed economy without economic activity by the State, the national income is by definition always equal to the sum of consumption and investment, whether we regard these quantities in real or in monetary terms. If we denote consumption with C, investment with I, and national income with Y, then the following definitional equation holds good:

$$[1] \qquad Y = C + I.$$

Now real consumption is a function of real income, or what comes to the same thing, consumption in money terms is, with a given level of prices, a function of money income:

$$[2] \qquad C = C\ (Y).$$

Further, investment, real or monetary, is, with given expectations of profit, a function of the rate of interest (Keynes assumed for the sake of simplicity that only a single rate of interest exists in the economy, that is, only a single kind of interest-bearing claims):

$$[3] \qquad I = I\ (i).$$

Function [2], the so-called consumption function, expresses the propensity to consume of households, and function [3], the so-called investment function, expresses the propensity to invest by entrepreneurs. Functions [2] and [3], therefore, relate to the modes of behaviour of households and entrepreneurs.

Between the four variables E, C, I and i three relations obtain, which can be reduced to a relation between two variables if we rewrite [1] with the aid of [2] and [3], in the following form:

$$[4] \qquad Y = C\ (Y) + I\ (i).$$

Our problem therefore possesses a single degree of freedom. We assume that the level of the rate of interest is determined by the banking system, and then relation [4] determines the equilibrium level of income — either real income, or money income at the ruling prices. Equation [4] may also be interpreted in the following way: with a given rate of interest and a given propensity to consume, the equilibrium level of income must be at such a level that consumption out of this income plus investment is exactly equal to this equilibrium level of income or, what is to say the same thing, that voluntary saving is equal to voluntary (or intended) investment.

Relation [4], of which we have just given the economic interpretation, is Keynes' answer, reduced to the simplest terms, to the question as to how, at any point of time, national income and employment are determined in a closed economy without State activity. All the rest is by way of support and elaboration. In particular, the so-called « liquidity » theory of interest is not an essential part of the *core* of Keynes' theory of employment. The liquidity theory of interest comes in if we wish to assume that the level of the rate of interest is not exogenously determined, but is itself a variable which has to be explained. We have then in addition to equations [1] and [3] the further equation:

$$[5] \qquad \alpha\ (Y, i) = M.$$

On the left side we have the demand for money for transaction and speculative purposes represented as a function of Y and i, while M represents the quantity of money existing in the economy. But we must notice that the addition of equation [5] not only increases the number of equations by 1 but also the number of variables by 1. The quantity of money is introduced as a new variable. The Keynesian model has as before a single degree of freedom. One can therefore now ask how Y, I and i are determined with a given quantity of money fixed by the banking system. But one can also, more realistically, ask how Y, and M are determined with the *rate of interest* fixed by the banking system.

This construction, as far as we have developed it up to now, *gives a static explanation*

of the equilibrium values of particular variables. For any essential understanding we must ask how the equilibrium values behave with changes in data, that is, we must carry out a comparative-static analysis. We must, for example, examine with the aid of relation [4] how income varies *coeteris paribus* with a change in the rate of interest or a change in the propensities to consume or invest. Such a comparative static analysis leads us to the well-known theorems which make up the central content of the General Theory. On the assumptions set out these theorems are unassailable. It is simply incomprehensible how Hans Mayer can come to the conclusion: « It (the Keynesian system) is above all not a system in the usual sense of a logically uncontradictory combination of partial relationships and partial truths brought together in a comprehensive view of the problems as a whole » (34). On the contrary, the Keynesian system is as logically free from contradictions as the system of Walras. It is, in fact, a very simple consistent system (35).

What may be the subject of controversy are simply the assumptions and nature of the Keynesian model. Some writers (Mayer and Röpke) have raised basic doubts against the use of macro-economic quantities and relationships. Such quantities are, according to Mayer, concepts « which because they are made up of unhomogeneous and therefore unsummable phenomena cannot be significantly brought together in a total or aggregate » (36). Therefore, the Keynesian analysis is « a peculiar kind of theory which has nothing in common with what has previously been described as theory » (37). In fact, the macro-economic method of treatment is a regression: « The whole progress of economic theory up to now has coincided with the abandonment of the global or macro-economic treatment and the basing of theory on elementary, given, and directly experienced phenomena » (38). Furthermore, Keynes' construction suffers because it uses the problematic concept of « equilibrium » which is one of the « fetishes of economic theory » (39).

Now it is quite certain that the concept of equilibrium was not introduced by Keynes. It is as old as economic science itself. The whole of economic theory from Adam Smith to Ricardo, Mill, Walras, and Marshall, down to modern times, gives this concept a central place. No theoretical economist up to now has disputed the significance of equilibrium analysis for the understanding of economic phenomena. This is, of course, not to say that the analysis of *processes* is not just as, or even more, important. But economic theory cannot get on without equilibrium analysis. Mayer must stand alone in maintaining that economic theory has up to now been pursuing a « fetish ».

Similarly, Keynes is, of course, not the originator of macro-economic analysis. This, too, is as old as economic theory. The Physiocrats employed it with great virtuosity, as did the English classics. One could, in fact, say that the economic thought of the classics is predominantly macro-economic. Only with Walras, Marshall and the Austrian school is there a trend to micro-economic analysis, or to a total analysis based on micro-economic concepts, which attains to its most masterly perfection in the work of Walras. To see this devolopment as a definite step forward as compared with the classical total analysis on a macro-economic basis, is, surely, only true within limits. *Each of the two methods of treatment has its advantages and disadvantages, and both therefore, must be cultivated and applied.* As contrasted with the neglect of macro-economic relationships since Marshall and Walras, the renaissance of Keynes may be seen as a return to the modes of thought of the classical economists (40), and at the same time as an important advance in the practical relevance of economic theory.

Macro-economic analysis permits of economic relationships being surveyed in their broad lines, while certainly leaving the details

(34) H. Mayer, *op. cit.*, p. 42.

(35) J. H. Williams (*op. cit.*, p. 6) describes this system as follows: « In its essentials, the Keynesian system, like almost any consistent theory, is simple ».

(36) H. Mayer, *op. cit.*, p. 41.

(37) *Op. cit.*, pp. 41-2.

(38) *Op. cit.*, p. 50.

(39) *Op. cit.*, p. 41.

(40) « It seems to me that Keynes to a large measure has reverted to the early classicals in the respect that he took a large view of the broad forces influencing the economy » (A. H. Hansen, *op. cit.*, p. 6).

out of account. Micro-economic analysis, on the other hand, penetrates to the actions of individual subjects, the total analysis of which has to work with such a large number of variables that it cannot provide practical and applicable results and is not capable of quantitative treatment. Especially if we are interested in practically applicable theorems, macro-economic analysis will always be more significant. Anyone concerned with economic policy *has* to think in macro-economic terms (41). In particular, all theories of the trade cycle up to now have been macro-economic theories. Provided that one remains conscious of the limitations of macro-economic analysis it can be an extremely valuable and useful tool. Röpke has lately come to this conclusion that the macro-economic treatment has its advantages, and he now believes that analysis in terms of macro-economic quantities has been refined by the methods of the « New Economics » (42). Previously he was one of the most vigorous opponents of such methods (43). But he is still wrong in thinking that Keynes believed that analysis in terms of the aggregate quantities of the economic circulation (« Kreislauf ») was the only method and the only one worth cultivating in the long run, and that Keynes claimed that his method and theory should be the exclusive and dominating ones (44). One is compelled to ask where on earth Keynes ever said that? In all his writings I have not been able to find even the faintest hint of such exclusive claims. I know also of no follower of his who has made such a claim. Micro-economic analysis will, as Keynes never contested, always preserve its significance alongside macro-economic analysis.

How far one wishes to go in constructing aggregate concepts will depend, of course, on the particular problem. The larger the aggregates, the cruder the picture of the relationships involved. Anyone who criticises the Keynesian model for using too crude aggregates simply has to refine them into partial aggregates. This is to increase the number of variables and equations, and relationships previously obscure will then become apparent. The Keynesian model will not lose its value. But the great advantage of this model consists mainly in its simplicity, comprehensiveness, and its possibilities of development (45). It is, of course, wrong for Mayer to hold that aggregation cannot significantly be carried out because unhomogeneous and unsummable phenomena are being brought together in a total aggregate. Does he mean that national income, total consumption, total investment, profit, contractual incomes are all senseless aggregates? Then any statistical year-book would be a collection of senseless figures. Any aggregate quantity is, of course, the sum of similar partial quantities, and macro-economic functions can always be constructed and conceived as the sum of micro-economic functions.

If one derives, for example, the consumption function ($C = C(Y)$) from individual demand functions, then this aggregation implies a constant distribution of income or a particular relationship between individual incomes and the national income. The consumption function can also be interpreted in another way, as quite independent of individual consumption functions, that is, as an assumption, statistically expressed, about the behaviour of a group or groups. But in whatever way the consumption function is interpreted, the question always remains as to *what* income it is which determines consumption (the actual present income, the income expected in the next period, or an average of the income expected over several periods); and the question also remains as to whether income is the sole determinant of consumption. We cannot here discuss these problems at length. Since the appearance of the General Theory they have been the subject of various detailed studies.

(41) See E. Schneider, *Einführungk in die Wirtschaftstheorie*, Part I, 3rd edit., pp. 53-5; also W. Lautenbach, *Zins, Kredit und Produktion*, Tübingen, 1952, p. 5 ff.

(42) W. Röpke, *Was lehrt Keynes?*

(43) W. Röpke, *Civitas Humana, op. cit.*, p. 343 ff.

(44) W. Röpke, *Was lehrt Keynes?*

(45) « Simplification of our theoretical set-up is being welcomed primarily because simple set-ups yield, or seem to yield, simple results of real or putative practical value. Keynes' model does so without any statistics. But the real thing to aim at is not quantitative theory — all economic theory is quantitative by nature — but numerical theory: the highest ambition of the economist is to be able to figure out developments from any given state of the economic system. And this goal that seemed so far off, now seems to be brought within reach, within easy reach even, by Keynes' analytic scheme ». (J. Schumpeter, *Keynes and Statistics*, in « The Review of Economic Statistics », 1946, p. 196).

Some of Keynes' original formulations have been shown to be untenable, for example his proposition as to the stability of the consumption function. It has also been shown that the consumption function cannot always be expressed in the simple form C(Y), but that expected changes in income and other factors must be taken into account (46). But it must be remembered that the introduction of new variables into the consumption function also implies the introduction of new variables into the demand functions as used by Walras. The macro-economic consumption function is the exact counterpart of the micro-economic individual demand function of the Walrasian type. It represents the individual consumption of a period as a function of the ruling prices of goods and of the income of the same period. The summing of individual demand functions, or consumption functions, of the Walrasian type, gives us the Keynesian consumption function.

It should be obvious that macro-economic analysis is an instrument which is not simply applicable to a particular kind of economic system. The proposition of Mayer that the global method is more convenient for planners, and the opinion of Röpke that operating with « collective » quantities leads directly to collectivism, are simply absurd. The Physiocrats were no planners; and a statistical handbook surely does not of itself prepare the way for collectivism. In any case, the consumption function, that is, the function which describes the dependence of consumption on the variables which determine it, remains as one of the essential pillars of the theory of income and employment (47). The Keynesian form of the fuction C (Y) is to be regarded as a simple first approximation.

Mayer also criticises the Keynesian system for being purely static: « Keynes did not succeed, as he apparently thought he did, in constructing a dynamic system (to use the modern catchword), but particular dynamic elements in his work, in particular in his theory of expectations, are in direct contradiction to his fundamentally static system » (48). It is true that Keynes' analysis is formally a comparative-static analysis and that Keynes himself did not make his system dynamic, although his verbal arguments often have a thoroughly dynamic character. But it is not too difficult explicitly to « dynamise » his system, and this has already been well advanced. Moreover, the knowledge obtained by his comparative-static analysis remains of the highest importance.

Mayer also believes that the Keynesian system fails « to determine the end of the economy as a whole as the optimal satisfaction of human needs, as was done by the Austrian school, Marshall, Pigou and others. To make full employment the end is to confuse means and ends. The end must be the meeting of needs by the creation of income » (49). Can Mayer seriously believe that Keynes would have disagreed?

Mayer also goes wrong when he argues that Keynes' attention is devoted almost exclusively to the sphere of money and credit and that he has little sense of the « real » processes involving goods and services (50). Such a mistaken judgement can only be based on an insufficient study of Keynes' work. For in fact the opposite is the case. Not only did Keynes not overlook or neglect the « real » processes, but rather he was the first to study the mutual interaction of « real » and monetary processes: « Nobody before him, as far as I know, had brought all the relevant factors, real and monetary at once, together in a single formal scheme, through which their interplay could be coherently investigated » (51).

(46) We refer the reader to: *Five Views on the Consumption Function*, in « The Review of Economic Statistics », 1946, p. 197 ff.; A.H. Hansen, *Business Cycles and National Income*, New York, 1951, Chap. 10; T. M. Brown, *Habit Persistence and Lags in Consumer Behaviour*, in « Econometrica », Vol. 20, 1952, p. 355 ff.

(47) Mayer has clearly overlooked the entire discussion about the Consumption Function. Otherwise he would not have been able to maintain the completely mistaken point of view that the Consumption Function — the main pillar of the Keynesian system — has been shown to be simply « the illusion of a pillar » (*op. cit.*, p. 48).

(48) H. Mayer, *op. cit.*, p. 52. « Dynamic » is not, as Mayer believes, simply a slogan but a term describing a certain kind of analysis. Mayer, here too, makes the common mistake of holding that the introduction of expectations suffices to make a theory dynamic. A clear understanding is obtainable from G. Haberler, *Prosperität und Depression*, Bern, 1948, p. 241.

(49) H. Mayer, *op. cit.*, p. 51.

(50) H. Mayer, *op. cit.*, p. 51.

(51) A. C. Pigou, *Keynes' General Theory*, London, 1950, p. 65.

IV.

Let us turn now to some of the details of Keynes' analysis which are still the subject of misunderstanding. It is said that « Keynes did not succeed in reconciling free competition with the existence of unemployment » (52); that rather an equilibrium condition with under-employment can only occur with rigid wages and not « in the empirically most frequent case of flexible wages ». In the first place, flexible wages, upwards and downwards, have for a long time not been « the empirically most frequent case ». The assumption which corresponds today with the real world is that wages are only freely alterable upwards. But let us assume that wage-rates are alterable upwards *and* downwards. The question now arises as to whether the system can settle in a condition of under-employment. Keynes examined this problem in great detail. It is wrong to suggest, as Hahn has suggested, that Keynes in his analysis always used the assumption of constant wage rates. In his Chapter XIX (Changes in Money Wages) and XXI (The Theory of Prices) Keynes studied in detail the effects of a general change in wage-rates on employment and prices, and the question as to whether involuntary unemployment can be removed by a *general* wage reduction. All the main points raised by this problem have already been touched on by Keynes himself (53). In contrast with the classical thesis that with complete flexibility of wages upwards and downwards unemployment can never exist, and that in a free market economy full employment will always come about (54), Keynes comes to the conclusion that « there is no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment... The economic system cannot be made self-adjusting along these lines » (55). Keynes' argument has been repeatedly confirmed by more recent study. L. G. Reynolds comes to the conclusion in a recent paper: « It is possible to construct several quite plausible models in which a once-for-all cut in money wage rates would yield a new equilibrium position with a higher level of employment. Second, it is doubtful whether such an equilibrium would be approached very rapidly, or even approached at all, because of repercussions set up by the initial wage cut; *i.e.*, failure of other data to remain constant as they must do in equilibrium reasoning. Third, the issue is not of much practical importance anyway because real demand can be increased more quickly and with less social strife by monetary and fiscal measures. Blanket wage reductions, even if feasible, would not be a very useful prescription for depression unemployment » (56).

It is, therefore, incorrect that the Keynesian theorem as to the possibility of under-employment in a free market economy depends necessarily on the assumption of rigid wages (57).

V.

Equally unfortunate misunderstandings can also be found repeated in discussions of saving and investment, or saving and investing, and the role of the rate of interest. Hahn, for example, continues to maintain « the conservative opinion that saving does not reduce effective demand » (*op. cit.*, p. 92), that « saving creates its own investment opportunities » (p. 99 and 102), and that « saving... does not create unemployment » (p. 103). As for the classical economists, the problem « of filling the gap between saving and investment » does not exist for Hahn (p. 186). He assumes that voluntary saving out of a particular national income is automatically adjusted by means of the rate of interest with voluntary investment

(52) H. Mayer, *op. cit.*, p. 45.

(53) See A. H. Hansen, *Monetary Theory and Fiscal Policy*, Chapter 8, Wages and Prices, New York, 1949.

(54) A. Hahn remarks, for example: « If wages were adjusted downwards, under-employment... would disappear and, incidentally, aggregate wages would increase » (*op. cit.*, pp. 141-2).

(55) *General Theory* etc., p. 267.

(56) L. G. Reynolds, *Wages in the Business Cycle*, in « American Economic Review Papers and Proceedings », 1951, Vol. 42, 1952, pp. 85-6. The economic effects of rising money wage-rates are also examined in detail in this work. See also D. Patinkin, *Price Flexibility and Full Employment*, in « American Economic Review », Vol. 38, 1948.

(57) See D. Patinkin, *op. cit.*; O. Lange, *Price Flexibility and Employment*, Bloomington, 1944; F. Modigliani, *Liquidity Preference and the Theory of Interest and Money*, in « Econometrica », Vol. 13, 1944; J. Tobin, *Money Wage-Rates and Employment*, in « The New Economics » (ed. by S. Harris), New York, 1947, p. 572 ff.

of an equal quantity. It is one of the most important conclusions of recent theory that the classical mechanism of the interest rate is not always effective, and that, when this mechanism is not effective, the balancing of voluntary saving and voluntary investment comes about by means of changes in income. If more is saved from a particular level of income, corresponding with a particular level of employment, than entrepreneurs voluntarily invest, then a process of contraction is started which continues to reduce income until saving corresponds with the level of voluntary investment. *It is in this emphasis on the effects on income that the decisive differences between the new theory and the classical theory exist as to the conditions of disequilibrium being removable by changes in prices (or price effects) with employment unchanged.* A. H. Hansen is completely correct when he states: « The "income effect" on total realised savings was formerly not understood. It is impossible to go back over the pronouncements of statesmen in this period, or even the writing of economists, without being profoundly impressed with the fact that erroneous policies sprang from a preoccupation with "price effects" and a failure to recognise income effects » (58). If one compares, for example, the theory of international trade before 1936 with the theory as it is today, one can see the profound changes which have come about by taking into account such « income effects ».

It is equally incomprehensible how some writers still fail to perceive that in a closed economy without economic activity by the State, investment at the end of any particular period, however long, must necessarily be exactly equal to saving, that is, that the total actual saving in the economy is identical with the total actual investment (59). If one defines the actual saving of the year 1952 as the difference between the income and the consumption of the year 1952, then it follows from the definition of income as the sum of consumption and investment that saving in 1952 was exactly equal to investment in 1952. In saving and investment we, of course, include both the intended and the unintended saving and investment.

This *ex post* proposition must not be confused with the theorem that a lasting increase in intended investment by a particular amount will lead necessarily to an increase in income, the marginal propensity to consume being less than 1, so long as voluntary saving from this level of income is exactly equal to the intended level of investment. The equation:

$$I_{vol.} + I_{invol.} = S_{vol.} + S_{invol.}$$

is an *identity* and always holds good. The equation:

$$I_{vol.} = S_{vol.}$$

is, on the other hand, *an equilibrium condition*, and only holds good in a condition of macro-economic equilibrium.

A. Weber remarks with reference to Forstmann's analysis that « the proposition that every investment creates the necessary saving in the sense of a genuine (or voluntary) saving can be shown to be false » (*op. cit.*, p. 414). We can only say that such a proposition has never been put forward by Keynes or any other writer. The equality of investment and « genuine » saving only comes about through time by the operation of the multiplier process. It is also incorrect when Weber argues in this connection that in Keynes' analysis there is « implicitly no place for the processes of inflation and deflation, just as for Keynes there can be neither profit nor loss in the economy as a whole » (*op. cit.*, p. 414). It is well known that the analysis of processes of deflation and inflation has a central place in Keynes' work, although in the General Theory the study of inflationary processes is comparatively in the background as contrasted with deflationary processes. It is in his work on « *How to Pay for the War* » (London, 1940) that we find a detailed treatment of inflation by the same tools of analysis as Keynes had earlier applied to processes of deflation. Of course, the profits and losses of entrepreneurs

(58) A. H. HANSEN, *The Influence of Keynesian Thinking in the United States*, p. 10.

(59) See A. FORSTMANN, *Geld und Kredit*, Göttingen, 1952, p. 383 ff. A. Weber agrees with Forstmann when he writes: « The famous Keynesian equality of savings and investment has been proved false » (A. WEBER, *New Economics, Revolution oder Konfusion*, in « Zeitschrift für das gesamte Kreditwesen », 1952, p. 413).

in the economy as a whole play a decisive part in Keynes' work, though more so in his Treatise on Money than in his General Theory. But even if it is not explicitly set out in the model in the General Theory, it is easy to see that profits and losses have a part to play if one divides total saving into the saving of non-entrepreneurs and the saving of entrepreneurs. It then holds *ex post* for every period:

$$I = S_{non\text{-}e} + S_e$$

or:

$$S_e = I - S_{non\text{-}e}$$

It is in this form that the Keynesian investment equation appeared in the Treatise on Money. From this equation it follows that if non-entrepreneurs do not save:

$$S_e = I.$$

In this special case investment will always be equal to the unconsumed part of total profit. There can be no doubt that the distinction between the incomes of entrepreneurs and of non-entrepreneurs, and between the consumption and saving of the two groups, gives us a deeper understanding of the mechanism by which an increase in the propensity to consume works itself out in the economic system. Keynes clearly understood this, as can be seen in his preface to the German translation of his Treatise on Money. He says there: « If windfall profits and losses are included in income (as Keynes did not include them in the Treatise)... and if saving is regarded as the excess of income so defined over consumption spending, then it follows that saving is in all cases exactly equal to the value of current investment. That is, the volume of total savings ceases to be an independent factor. Its level can no longer be affected by the independent decisions of the different receivers of income and by their decisions as to the quantity of their income which they consume. It depends rather on the level of current investment ». Keynes at this time found this to be a paradox (60). But one can see very plainly here, and at other places in his Treatise (61), how he was already then wrestling with problems which he only fully clarified in the General Theory. It is clear also how right Keynes was when he remarked in the Preface to the General Theory: « What in my own mind is a natural evolution in a line of thought which I have been pursuing for several years, may sometimes strike the reader as a confusing change of view ». We can explain Keynes' failure to retain in the General Theory the distinction between the savings of entrepreneurs and non-entrepreneurs simply by the fact that his theorems did not require this distinction. The model was more simple, though, of course, certain relationships were no longer explicit. In this respect the model constructed by C. Föhl in his profound and illuminating work (*Geldschöpfung und Wirtschaftskreislauf*, Munich & Leipzig, 1937) is superior to the simpler construction of Keynes (62).

To conclude these remarks on the equation $I = S$ we shall make two points:

(a) The equation holds only *ex post* in a closed economy without economic activity by the State. In an open economy with econ-

(60) J. M. Keynes, *Vom Gelde* (*A Treatise on Money*), München und Leipzig, 1932, p. x.

(61) See Keynes, *op. cit.*, pp. 477-8.

(62) This book is the greatest German achievement in the last 25 years in the field of monetary theory, and has not found among German economists even a fraction of the attention it deserves. The author of this work, quite independently from, but almost simultaneously with Keynes, and starting from his Treatise, developed a theory of employment which not only was in complete agreement with the conclusions of Keynes, but has the advantage of greater clarity and rigour in its reasoning. Keynes' model only achieved a precise mathematical formulation in the works of Harrod, Hicks, Lange, and Meade, and only then were Keynes' intentions fully clarified. On the other hand, Föhl's work, thanks to its mathematical reasoning and precision, was clear from the start. Professor K. Philip of Copenhagen, reviewing Harrod's life of Keynes, has recently written in the paper « Politiken » of 5.12.1952 as follows: « Föhl so mastered Keynes' Treatise on Money that he came to think along the same lines as Keynes, and without ever having communicated with him, published at the same time as the General Theory a book which says, on many essential points, the same as Keynes says. Where Keynes was sharply critical and colloquial in tone, Föhl reasoned with geometrical precision and German thoroughness. Keynes was world famous... but Föhl was scarcely known even among his fellow-countrymen and today has been forgotten ». The work of Föhl, which is by no means second to the General Theory in significance, ought to be rediscovered by economists and studied in detail. Föhl wrote a short summary of his essential ideas in two articles in the « Nordisk Tidsskrift for Teknisk Okonomi », 1941, under the titles, « Kinematik und Dynamik des Wirtschaftskreislaufs », and « Die Erhaltung der Vollbeschäftigung ».

omic activity by the State, the equation is replaced by the following:

$$S = I_{priv.} + (Ex - Im) + (G - T),$$

where Ex stands for exports, Im for imports, T for the tax receipts of the State, G the expenditure of the State on goods and services plus transfer payments by the State and plus subsidies. This equation is, of course, one of the foundations of all social accounting (63).

(b) The I — S relation is not absolutely necessary for the theory of income and employment. All the relationships can be just as well expressed by using consumption (or the consumption function) instead of saving (or the saving function) (64).

VI.

Closely connected with these confusions about the relation between saving and investing is the thesis that Keynes branded saving as a vice and encouraged the public to spend wastefully. Röpke, for example, writes: « It is one thing to discover a number of problems relating to the process of saving not previously investigated, but it is not possible without serious consequences to destroy in men the idea that they are doing right if they save from their income and build a reserve for themselves and their descendents instead of using up the whole of it » (65). But where did Keynes ever say that saving is *always and in all circumstances* economically disastrous? I know of no passage in all his works where he even hints at such a conclusion. What he really said was this: *in conditions of under-employment at all stages of the process of production*, appeals to save more will only result in a further fall in the national income and in employment. A rise in the national income and in employment can, with a given propensity to consume, only be obtained by additional investment and for the carrying out of this investement *no previous voluntary saving is necessary*.

The validity of this proposition is no longer the subject of controversy and would probably not be contested even by Röpke. Keynes has never denied that in a state of full employment an expansion of investment presupposes a *previous* increase in the propensity to save, if an inflationary process is not to result. But here we see clearly the distinction between a world with under-employment and a world of full-employment. What holds good for the one does not necessarily hold good for the other (66). By a world of under-employment we mean here one where there is general involuntary unemployment *with the apparatus of production otherwise intact*. So-called structural unemployment, that is involuntary unemployment which arises because some parts of the apparatus of production have been destroyed, or because an economy in a state of full employment has suddenly from outside received a new stream of workers able and willing to work, does not come under the definition of involuntary unemployment. In this case, the credits necessary for the additional invest-

(63) See E. Schneider, *Einführung in die Wirtschaftstheorie*, Vol. III, 1952, pp. 188-9.

(64) *Op. cit.*, pp. 108-9.

(65) W. Röpke, *Was lehrt Keynes?* Röpke writes in the same article that one cannot « recommend in particular cases to parliaments and public opinion that saving and economy are virtues, while generally condemning them as stupid and harmful... Not to realise this is typical of those with purely intellectual constructions who forget social realities in their concern with the integral calculus ». But what have Keynes' constructions to do with the integral calculus, nothing of which appears anywhere in the whole of Keynes' book? Surely those guilty of forgetting economic realities are those who treat the condition of full employment as always automatically realised in free-market economics.

(66) For example, V. Muthesius, in his article *Der Mythos des Keynesianismus*, (« Frankfurter Allgemeine Zeitung », 30.8.1952) states that Keynes' theory implies a contempt for saving and produces as principal witness A. P. Lerner, quoting from his article *La théorie générale de M. Keynes*, in « Revue Internationale du Travail », Vol. 34, 1937: « C'est par une faute logique de généralisation — faute d'ailleurs répandue — qu'on estime que l'épargne, puisqu'elle enrichit l'individu, ne saurait manquer de profiter à la Collectivité ». Muthesius has misunderstood Lerner, who was obviously only concerned with the simple proposition that what may be good or right from the individual's point of view cannot be applied forthwith to the economy as a whole. It is clear that Adam Smith's fallacy is very difficult finally to stamp out: (« What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom », Wealth of Nations, Book IV, Chap. 2).

N. Johannsen who anticipated the entire savings-investment analysis of Keynes, saw these relationships correctly. The second part of his book, *Die Steuer der Zukunft* (Berlin, 1913), which is headed « Business Depressions », has on the title page a picture with the caption beneath « Saving and its offspring, prosperity and poverty ». See also W. Lautenbach, *op. cit.*, Section I.

ment must correspond with an equal voluntary saving, if an inflationary process is not to result (67). Keynes would never have contested this, though happily he had no reason to examine these cases. In his General Theory, he wanted simply to direct the attention of economists to those theorems which hold good in a world of general under-employment with the apparatus of production intact, and which had previously been neglected. But he was hardly guilty of any exclusive emphasis on these kinds of problem. On the contrary, it is those critics who are wrong who hold that the national income can *only* be increased if there has previously been some voluntary act of saving, and who hold this proposition as a *generally* valid theorem.

VII.

I turn now to a misunderstanding which brings us to the question as to whether the General Theory is really « general » or only a special theory valid for particular cases. H. Mayer, in the course of his recent lecture, thought that he could bring down the Keynesian theory by denying the proposition that the marginal propensity to consume can generally be regarded as lying between 0 and 1:

(1) « Anyone earning a bare subsistence wage and receiving a small addition to his income will, in this situation, spend the entire increase on consumption ».

(2) « If he receives a larger increase, then higher tastes and cultural needs will arise, which are in principle unlimited. There is therefore no guarantee that any of the increase will be saved... The so-called law propounded by Keynes is, therefore, psychologically and economically false. In my own country we battle desperately with the exact opposite of the Keynesian law, that is, with a preponderance of consumption even when there is a rising income » (68).

Now it is quite true that Keynes assumed that the marginal propensity to consume always lay between 0 and 1. But nothing prevents us from studying within the framework of Keynes' analysis how the results will be affected if the marginal propensity to consume is equal to 1, or is assumed to be greater than 1. If the marginal propensity to consume is greater than 1 then an increase in investment will lead to a non-convergent process of expansion. A convergent process of expansion only occurs if the marginal propensity to consume is smaller than 1. It is true, therefore, than Keynes only considered a particular case which nevertheless can be regarded as the regular case.

That Keynes in his General Theory was interested mainly in special cases becomes particularly clear if we ask how an increase in the propensity to invest affects the level of national income through the general equations [4] and [5], that is, if there is a shift of the investment curve to the right. If we denote the change in the investment function as da, then the change in the equilibrium level of income, after the process of adjustment has worked itself out, will be given as follows:

$$dy = \frac{1}{\frac{dS}{dy} - \frac{\frac{dI}{di} \cdot \frac{dL}{dy}}{\frac{dL}{di}}} \cdot da$$

This « *general multiplier relation* » (69) is not discussed by Keynes. The Keynesian investment multiplier is rather the reciprocal of the marginal propensity to save. This multiplier is, however, as can easily be seen, a special case of the general multiplier for the case, that is, when either $\frac{dI}{di} = 0$ (*i.e.* when investment is perfectly inelastic in relation to the rate of interest), or when $\frac{dL}{di} = \infty$ (*i.e.* when the demand for money is perfectly elastic in relation to the rate of interest). Keynes in fact only considered two special cases: the case when investment cannot be stimulated by a fall in the rate of interest however large, and

(67) See J. R. Hicks, *World Recovery After War*, in « Economic Journal », 1947; and E. Preiser, *Geldschöpfung oder Sparen?*, in « Jahrbuchen für Nationalökonomie und Statistik », 1950.

(68) Quoted by H. Rittershausen, *op. cit.*

(69) V. E. Schneider, *Einführung in die Wirtschaftstheorie*, Part III, Tübingen, 1950, pp. 151-2.

the case where an increase in the quantity of money by the banking system does not lead to any change in the rate of interest — two cases which, as is well known, are characteristic of a state of depression (70). Keynes' theory of employment is, therefore, a « special » theory to the extent that Keynes was predominantly interested in these two cases. *But the model we have set out in equations* [4] *and* [5] *is, of course, not subject to these limitations. This cannot be sufficiently overemphasised.* Within the framework of a comparative-static analysis, all conceivable cases can be studied. One can give any conceivable value to the relevant co-efficients measuring the rate of increase of the consumption function, the investment function, or the liquidity function.

It is therefore quite clear that the Keynesian model described by equations [4] and [5] is no way limited in its applicability to the case of a depression. *The Keynesian theory is by no means exclusively a theory of depression, even if its intellectual roots go back to the great depression of the '30's, and even if Keynes was led to the questions he asked and to his apparatus of analysis by the conditions of the '30's and made the world of underemployment the main subject of his enlysis.* Even such a leading theoretical economist as J. R. Hicks wrote in 1937 in his well-known article on « Mr. Keynes and the Classics »: « The general theory of employment is the economics of depression » (71). The same author, however, declared in 1945: « The great changes which have taken place in the world since 1936 have provided an opportunity for applying Keynesian analysis to new problems. Some of these new applications considerably modify our view of the theory itself. In 1936 unemployment seemed (at least in England and America) to be the most important of all economic problems. It was therefore quite natural for Keynes to have directed his work at the problem of unemployment. Most of us would at first have agreed that this was its essential significance. I myself in 1937 went so far as to write that the General Theroy was the economic theory of depression. We now know that this was a mistake. The theory has been considerably reinforced and has gained the support of economists who at first were very sceptical (such as Beveridge and, up to a point, Robbins). We have discovered now that the theory is no less applicable to conditions which are the extreme opposite of depression, those of a boom in an economy mobilised for total war » (72). What Hicks is saying here is now generally accepted. The fact, that an economic theory arises out of a concern with a particular practical problem does not limit its applicability. Nearly all economic theory has been built up out of a concern with the burning questions of the day. Already in his General Theory, Keynes (in Chapter XIX, on The Theory of Prices), set out in full detail why and in what circumstances inflation may set in before full employment is reached. The role of bottlenecks was set out with full clarity (73). As J. H. Williams rightly puts it: « No better analysis could be desired as to why we experienced the inflationary conditions of 1936/37 on a comparatively low level of employment and nothing further would be needed to explain the much more serious inflation of the post-war period » (74). Keynes later in his famous work « *How to Pay for the War, a Radical Plan for the Chancellor of the Exchequer* » (London, 1940), has proved the value of his analysis for the study of processes of inflation in his Chapter IX (Voluntary Saving and the Mechanism of Inflation). The recommendations as to policy which he there advances are completely different from those for the fighting of a depression. As Hansen rightly remarks: « Some superficial critics assume that a Keynesian always wants to spend more, and tax less. That, of course, is completely false. The Keynesian policy is designed to secure a balanced and growing economy with monetary

(70) See J. R. Hicks, *Mr. Keynes and the « Classics »; a suggested interpretation*, in « Econometrica », Vol. V, 1937.

(71) « Econometrica », 1937, p. 155.

(72) J. R. Hicks, *La Théorie de Keynes après neuf ans*, in « Revue d'Economie Politique », pp. 1-2 (Italics added). A. Forstmann, with a reference to Hicks' article of 1937, describes Keynes' theory as a theory of depression. He appears to have overlooked this later article by Hicks (v. A. Forstmann, *Geld und Kredit*, II Göttingen, 1952, p. 397).

(73) Fritz Meyer's remarks on this question are in full agreement with Keynes' argument. (See his article, *Geldpolitik, Vollbeschäftigung und Wirtschaftsordnung*, in « Ordo », 1948, Vol. I, p. 91 ff).

(74) *Op. cit.*, p. 7.

equilibrium... Therefore, if there develops an inflationary situation caused either by a large increase in private investment expenditures, or by a necessary increase in governmental expenditures as, for example, in the current defence programme, Keynesian policy aims at curtailment of aggregate demand... So Keynesian economic policy is in fact not one-sided. It is not just expansionist. It is just as applicable for inflationary problems as it is for depression problems ». Hansen adds the significant observation: « And, indeed, in World War II the countries that most successfully coped with war inflation attacked the problem in terms of Keynesian analysis » (75).

VIII.

How is this thoroughly sound observation of Hansen to be reconciled with Röpke's statement that «Keynesism» means «Inflationism» and that all countries which have let themselves be guided by the Keynesian theory — that is, the so-called « full employment countries » — have been caught up in a whirlpool of inflation? According to Röpke, Keynesism is the general theory of a permanently threatening deficiency of demand, which leads to an economic policy which « must be constantly on the alert in order to cover this deficiency and ensure constant full employment ». This is, according to Röpke « the real revolution in economic thought attributable to Keynes ». It is the theory or ideology which « puts all the emphasis on the fear of deflation, on full employment at any price, on expansion and expenditure ». «Keynesism» stands « even at its best always for latent inflationism » (76).

We touch here on one of the decisive points in the current misunderstandings of Keynes' theory: that is, *the confusion, or identification, of the Keynesian theory of employment with the so-called « stagnation » thesis*, or with what Johannsen called the thesis of Permanent Depression (77). The Keynesian theory of employment answers the question as to what determines the level of national income and employment in the short period. The « stagnation » thesis is hardly a theory at all, but an unproved and unprovable guess that in mature « capitalist » economies voluntary investment, owing to insufficient profitable outlets, will always lag behind the level of voluntary savings out of full-employment income, and therefore the economy will always be tending to contract or to a state of permanent deflation. Anyone who accepts this thesis does certainly « put all the emphasis on this fear of deflation », and if he wishes to escape from permanent depression must constantly stimulate economic policy in the direction of expansion. The policy of permanent deficit spending is the inevitable result of assuming the stagnation thesis, *but only of the assuming of this thesis* (78). It is the correct economic policy if the stagnation thesis is considered to be valid ». But this has nothing whatsoever to do with the Keynesian theory of employment. From the Keynesian theory we can only conclude that *if* there is economic stagnation in a country a policy of expansion is necessary. This cannot be contested. Anyhow, the case of a secular stagnation is at least a theoretically conceivable

(75) A. H. Hansen, *The Influence of Keynesian Thinking in the United States*, pp. 10-11.

(76) W. Röpke, *Was lehrt Keynes?* Röpke carefully overlooks that inflations have regularly followed wars, long before Keynes. Or was the German inflation after the first world war the spiritual offspring of Keynes?

Röpke's interpretation of Keynes is, of course, to be distinguished from Hahn's statement that in the Keynesian system « output and employment... can only expand if (the amount of money) has been inflated ». Hahn's argument is, of course, incorrect. In the Keynesian system an increase in the quantity of money by open market policy can in certain circumstances give rise to an expansion, that is, if the increase in the quantity of money causes a fall in the rate of interest, and this fall in turn an increase in investment. But an expansion is also possible with the quantity of money remaining constant: (a) if, on certain assumptions, there is a fall of wages which leads to a rise in the propensity to invest; (b) by an increase in the propensity to consume; (c) by an increase in the propensity to invest; (d) by a fall in liquidity preference. (See E. Schneider, *Hahn Contra Keynes*, in « Schweizerische Zeitschrift für Volkswirtschaft und Statistik », Vol. 88, No. 5, 1952).

(77) The chapter on « Permanent Depression » in Johannsen's book (p. 328 ff) begins as follows: « The key to prosperity in existing conditions lies in the expansion. Can this continue permanently? Can it continue at a steadily increasing rate, or at least without diminishing? If not, the steadily increasing supply of saving cannot find an outlet in the expansion, just as they now cannot do so in normal times. Thus depression is bound to set in the Permanent Depression of the future ».

(78) Thus F. Neumark argues that the policy of permanent deficit-spending « rests essentially on the conviction that in economies of a certain type — so-called maturing economies — a structural depression sets in with a lasting tendency to underemployment » (*op. cit.*, p. 639).

one (79), and it may very well be sensible to examine how in these conditions employment can be stabilised at a high level without destroying the foundations of the free market economy. But in the General Theory the stagnation thesis has no central part. The thesis of declining investment opportunities in mature economies is only referred to on the margin of that work (80). What Keynes had to say on that subject is rather by way of illustrating the applications of his theory. The full elaboration of the stagnation thesis as a possibility to be taken seriously into account, and against which to take timely precautions, has not been undertaken by Keynes but mainly by American economists (Hansen, Schumpeter, etc.) (81). We must underline here that a full proof of the actuality of the stagnation thesis has not been produced. It can, on the other hand, be shown, as has been done especially by Terborgh, how many tendencies there are which contradict this thesis (82).

If particular countries after the war, expecting a wave of unemployment, have taken effective expansionist measures and have adopted a policy of full employment, in spite of the fact that the circumstances which they expected have not actually come to pass, then naturally neither the Keynesian theory nor the stagnation thesis can be convicted of having caused the inflations which have come about. These, in fact, have only confirmed the correctness of the Keynesian theory of income. The present inflations in many countries in the Western world have, of course, nothing to do with the belief in a permanent depression, but follow from the fact that owing to rearmament the effective demand by private individuals and by the State has been in excess of effective supply at the ruling level of prices (83). Anyone who, believing in the stagnation thesis, or for other reasons fearing a future depression, recommends a policy of « full employment » while employment is already at a high level, cannot make Keynes responsible for inflationary consequences. The aim of Keynesian economic policy is « to secure a balanced and growing economy with monetary equilibrium » (84), and the carrying out of this policy requires, according to Keynesian theory, varying measures adjusted to changing economic conditions (85).

IX.

Keynes « was ever sensitive to the changing conditions of his time and country » (86). Anyone acquainted with his work (87) will very well realise that he was above all the very opposite of a doctrinaire. He knew that there was no panacea valid for all situations which would stabilise employment at a high level whatever the initial conditions in which

(79) F. Neumark, *op. cit.*, p. 665.

(80) See A. Sweezy, *Declining Investment Opportunity*, in « The New Economics », edited by S. Harris, New York, 1947. It is incorrect to say as does J. H. Williams: « The core of the theory (Keynes') is his conclusion that an advanced capitalistic society suffers from a combination of a declining marginal propensity to consume and declining opportunities for investment » (*op. cit.*, p. 6). The essence of Keynes' achievement lies in his answer to the question of the determinants of the level of national income and employment. The policy of permanent deficit-spending follows only from an application of this answer to the case of a « stagnant » economy.

(81) « The peculiar doctrines of economic maturity have been elaborated in this country under the leadership of Dr. Alvin H. Hansen. It is not too seriously misleading to call it an American theory » (G. Terborgh, *The Bogey of Economic Maturity*, Chicago, 1945, p. 3).

(82) The stagnation thesis, as we have already mentioned, was well-known before Keynes. It was expounded with complete clarity by N. Johannsen — that remarkable anticipator of so many of Keynes' ideas — in his book *Die Steuer der Zukunft und ihre Einwirkung auf geschäftliche Depressionen und volkswirtschaftliche Verhältnisse* (Berlin, 1913).

(83) If inflation is to be avoided, « Governmental expenditures and private investment must be brought into line with taxes and savings. These are the Keynesian measures... They are not only compatible with the free price system but even necessary for its proper functioning ». A. H. Hansen, *op. cit.*, p. 13. The same point is made by Williams when he writes: « We clearly need a better rounded monetary - fiscal policy... Failing this, we should recognise that the next turn of the road would be toward direct controls, the alternative, in the present context of events, being more careful scrutiny as to the amount of inflationary pressure the economy can tolerate » (*op. cit.*, p. 18).

(84) A. H. Hansen, *op. cit.*, p. 10.

(85) This policy is identical with that aimed at by the O.E.E.C. countries of maintaining internal financial stability. The assumption of this objective implies that the countries concerned have undertaken to pursue a policy which excludes both inflation and price-increases equally with deflation and the contraction of employment. See, *The Internal Financial Situation in Member and Associated Countries: Report by a Group of Independent Experts*, O.E.E.C., Paris, 1952; also my article *Finanzielle Stabilität als Grundlage* (« Frankfurter Allgemeine Zeitung », 4.9.1952); also Per Jacobsson, *op. cit.*

(86) J. H. Williams, *op. cit.*, p. 14.

(87) Pigou justly enquires (*op. cit.*, p. 1): « How many Keynesians or, for that matter, anti-Keynesians either, have seriously studied his own book? ».

the economy found itself, and that varying monetary and fiscal measures would be necessary. Some writers have drawn the conclusion from this intellectual adaptability of Keynes that at the end of his life he threw over the conclusions of his General Theory and returned to the classical theories. Support is sought for this view in his last posthumous article (88) in which he speaks of « how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system » (89). We can see Keynes' meaning when we put this remark in its context, and I shall therefore quote the relevant paragraphs in extenso:

« I find myself moved, not for the first time, to remind contemporary economists that the classical teaching embodied some permanent truths of great significance, which we are liable to-day to overlook because we associate them with other doctrines which we cannot now accept without much qualification. There are in these matters deep undercurrents at work, natural forces, one can call them, or even the invisible hand, which are operating towards equilibrium. If it were not so, we could not have got on even so well as we have for many decades past. The United States is becoming a high-living, high-cost country beyond any previous experience. Unless their internal, as well as their external, economic life is to become paralysed by the Midas touch, they will discover ways of life which, compared with the ways of the less fortunate regions of the world, must tend towards, and not away from, external equilibrium.

Admittedly, if the classical medicine is to work, it is essential that import tariffs and export subsidies should not progressively offset its influence. It is for this reason that one is entitled to draw some provisional comfort from the present mood of the American Administration and, as I judge it, of the American people also, as embodied in the Proposals for Consideration by an International Conference on Trade and Employment. We have here sincere and thorough-going proposals, advanced on behalf of the United States, expressly directed towards creating a system which allows the classical medicine to do its work. It shows how much modernist stuff, gone wrong and turned sour and silly, is circulating in our system, also incongruously mixed, it seems, with age-old poisons, that we should have given so doubtful a welcome to this magnificent, objective approach which a few years ago we should have regarded as offering incredible promise of a better scheme of things.

I must not be misunderstood. I do not suppose that the classical medicine will work by itself or that we can depend on it. We need quicker and less painful aids of which exchange variation and overall import control are the most important. But in the long run these expedients will work better and we shall need them less, if the classical medicine is also at work. And if we reject the medicine from our systems altogether, we may just drift on from expedient to expedient and never get really fit again. The great virtue of the Bretton Woods and Washington proposals, taken in conjunction, is that they marry the use of the necessary expedients to the wholesome long-run doctrine. It is for this reason that,

(88) Lord Keynes, *The Balance of Payments of the U.S.A.*, in « Economic Journal », 1946, p. 172 ff.

(89) *Op. cit.*, p. 186. A. Weber writes: « What we need is a clearly thought out and generally understandable theory, logically constructed on the basis of the facts, which will serve as a guide to economic and social policy. The new theory fails in this respect. Still more completely do the attempts of those Keynesians fail who were accused by the master himself in a famous posthumous essay of unrealistic narrowness, while he himself recommended " the classical medicine " ».

A. Forstmann writes: « In his last scientific work, a celebrated essay in the " Economic Journal ", he warned against exaggerations of his theory already beginning to be noticeable among his followers. Unfortunately it was not granted that we should have the problems put more or less in their right perspective by the distinguished master himself. If Keynes had been granted a few more years of life, who knows whether he would not have taken a similar path to that of his critic Albert Hahn? Probably he would then have applied to his General Theory the criticism he himself made of his concepts in the Treatise on Money: " Because I no longer require my former terms to express my ideas accurately, I have decided to discard them — with much regret for the confusion which they have caused" » (*op. cit.*, pp. 741-2).

Similarly V. Muthesius in the « Frankfurter Allgemeine Zeitung » of 30.8.1952 writes: « In 1946 Keynes himself complained of the modernistic stuff of some of his followers and pupils and recommended " the classical medicine ", in accordance, that is, with the old pre-Keynesian theory and with, of course, a policy of economic freedom ».

Is it really still not clear that the Keynesian theory, like the classical theory, is concerned with a market economy and simply analyses different aspects of this market economy? It is, therefore, completely senseless and misguided to contrast the combination of « Classical Theory and a policy of Economic Freedom », on the one hand, with the combination of « Keynesian theory and a policy of Economic Unfreedom », on the other hand.

speaking in the House of Lords, I claimed that « *Here is an attempt to use what we have learnt from modern experience and modern analysis, not to defeat, but to implement the wisdom of Adam Smith* » (90).

It is quite clear from this passage, and it should hardly have been unclear after a reading of the General Theory, that *Keynes has never regarded his theory as a contradiction of previous theory but rather as an expansion and development of it.* He intended, with the theorems which he added to our tool box « not to defeat but to implement the wisdom of Adam Smith ». The purpose of his work could hardly be described more clearly than in these words. In this last article Keynes wished to remind economists that situations do in fact occur in which the theorems of the classical theory are relevant and that every theoretical proposition only holds good on certain assumptions. There cannot be the least question of Keynes at the end of his life having thrown over the propositions of his General Theory. R. F. Harrod, one of his closest collaborators, and fully acquainted with the origin and development of Keynes' ideas, has written to me about the above passage in Keynes' posthumous article as follows:

« ... I can affirm quite categorically that Keynes' views as expressed in the article to which you refer should not be interpreted as a renunciation of his main positions taken up in the General Theory... In so far as the article embodied a change of view it was one about practical possibilities... In his discussions during the war in the United States he was much encouraged by finding how many Americans who were concerned with international economics were already Keynesians, and he therefore began to take quite a different view about *practical possibilities*. If international economic cooperation could be conducted along the line of Keynesian economics rather than old fashioned economics that would be the ideal solution. He drew hope from the affirmed willingness of many Americans to come his way... At the same time he was much vexed by economists, particularly *publicists* who claimed to be his disciples and were opposing the work he was doing in the United States in the British press. This accounts for the words « turned sour and silly ». He felt that these writers were presenting a parody of his own views and overlooking his own belief, that his views *were reconciliable with many of the wider generalizations of traditional economics* ». (Italics added; letter of October 24th, 1952).

There can no longer remain any doubt on this subject for anyone who understands the logical character of economic theory and is able to distinguish between the correctness, and the relevance of applicability, of a theory.

If this interpretation of Keynes, which can hardly any longer remain a matter of controversy, has not been obvious from the start, this may be partly because « the publication of the General Theory was in a sense premature. The author evidently felt that he had no time to lose in giving his ideas to the world. Consequently he published them without having given them a fully definitive elaboration or a final form. Perhaps the same thing happened in Keynes' case as happened with the Principles of Ricardo. In the two cases the master left the larger part of the task of working out his ideas to his disciples » (91). For the rest, it may be relevant to compare Keynes' method of presenting his ideas with that of Adam Smith. Schumpeter, in his incomparable account of the *Wealth of Nations* wrote: « He (Adam Smith) discussed political maxims as though they were theorems. A quite different picture is discernible when we see him at the task of theoretical analysis. Then his gaze is directed at the facts and there are only occasional turns of phrase suggestive of a political ideal or a philosophic principle, and these foreign elements never become essential to his argument... The framework of his ideas and their applications is made up of theoretical propositions » (92). These words might be applied word for word to the work of Keynes. Moreover, Keynes often only sketched out his line of thought in its main outlines and left the detailed ela-

(90) *Op. cit.*, pp. 185-6 (Italics added). See also R. F. Harrod, *Life of J. M. Keynes*, London, 1951, p. 621.

(91) J. R. Hicks, *La théorie de Keynes après neuf ans*, p. 1.

(92) J. A. Schumpeter, *Epochen der Dogmen- und Methodengeschichte*, Grundriss der Socialökonomik, Part I, Tübingen, 1914, pp. 52-3.

boration to his readers. When a work is presented in this manner much discussion is necessary in order to set out clearly the theoretical framework and to recognise its content and range (93).

The third and last reason for the misunderstandings of Keynes' theory lies in exaggerations by the master and above all by some of his disciples which have given his work the superficial appearance of being « revolutionary », a quality which in fact it did not possess and which, according to the intentions of the master himself, it was not meant to possess. It is quite understandable that Keynes put special emphasis on the divergences in his approach from that of the classical theory. He wanted to call attention to the inadequacies of the classical theory and to the necessity for a thorough rethinking of the problems of a market economy. It is quite simply incorrect when Mayer writes as follows about the Keynesian theory: « It is presented today, and was originally presented, with most exaggerated claims, as being *the* modern economic theory, " the New Economics ". Its " exclusiveness " was especially emphasised, and it was regarded as finally superseding all previous theoretical systems » (94). But who in fact has ever claimed that « it is all in » the General Theory which contains the whole truth on economics and makes a study of all previous works unnecessary? Keynes' theory does not replace the classical theory but it adds something to it and makes it more useful: « Even those who found their bearings before, and on whom the General Theory did not impinge in their formative years, experienced the salutary effects of a fresh breeze. As a prominent American economist put it in a letter to me: « It (the General Theory) did, and does, have something which supplements what our thinking and methods of analysis would otherwise have been. It does not make us Keynesians, it makes us better economists » (95).

Of course, insofar as Keynes added to our knowledge he built on the work of his predecessors. It can in fact be shown that essential elements in Keynes' theory, down even to details, have been anticipated by previous economists. For example, the whole « savings-investment building block » — as Klein has called it — had already been completely set out in 1908 by Johannsen. Johannsen had also discovered the principle of the multiplier for the determination of income, and had actually given it that name. Wicksell had discovered essential elements of Keynes' theory in his *Interest and Prices* (1898) and later in his *Lectures* (1903). Important discoveries in the same field of problems are owing to D. H. Robertson. As Lange has shown, parts of the liquidity theory of interest can be found in the work of Walras. This theory is, in fact, simply a reformulation of the loanable fund theory of interest for the case where only a single kind of interest-bearing claims exist in the economy (96).

These anticipations, however, relate only to particular elements of Keynes' theory and not to the theory itself. Keynes' original achievement consists in having combined these elements together, added in the Consumption Function, and given us a new analysis which opens up new perspectives and leads to previously unknown theorems. But this creative achievement of Keynes was hardly a revolution: « There merely was evolutionary progress along Wicksellian-Robertsonian-Keynesian lines; and the heritage of the next generation will be just as essentially Robertsonian and Swedish as Keynesian, regardless of what they will choose to call it » (97). Keynes' great theoretical achievement will always remain in the construction of this theoretical apparatus, which has been shown to be extremely fruitful and applicable to the most differing actual conditions. Robbins, in « The Times » of 26/1/1951, has said of this achievement: « It has made an impact on our mode of approach which is lasting ». Keynes himself referred to

(93) See P. A. Samuelson, *Lord Keynes and the General Theory*, in « Econometrica », 1946, p. 190. We wish especially to recommend this outstanding essay.

(94) H. Mayer, *op. cit.*, p. 39.

(95) J. A. Schumpeter, *J. M. Keynes*, in « Ten Great Economists », New York, 1951, p. 291.

(96) If different rates of interest exist in an economy their levels cannot be explained by the liquidity theory. See E. Schneider, *Zur Liquidatätstheorie des Zinses*, in « Weltwirtschaftliches Archiv », Vol. 62, 1949. The same view is taken by W. Fellner: « I do not see how a case can be made for the convenience of the liquidity-preference theory, or some analytical extension of it, if the discussion is concerned with the structure of interest rates » (*op. cit.*, p. 271).

(97) W. Fellner, *op. cit.*, pp. 267-8.

his difference with the classical theory as a « difference of analysis » (98). This « difference of analysis » has given us an insight into the functioning of the market economy which the classical theory never gave us and never could give us (99).

H. Mayer, on the other hand, regards the Keynesian theory as a misconception and as a crude invasion of the world of economic science (100) « als einen Einbrüch der Unbildung in die Welt der Wissenschaft », which must be resisted by every means if « for decades to come, the continuity of intellectual progress is not to be broken, if we are not to be diverted from more profound ways of analysis, if the methods of fruitful research are not to be thrown away » — and also, if disastrous consequences are not to follow for the shape of our economic lives. To an audience which does not know Keynes' work, such a point of view (which can only be based on a deficient knowledge or a deficient understanding), may make some impression. Anyone who has really followed the work of Keynes and the subsequent developments can only say that *the true position is precisely the reverse.* The continuity of economic science will be broken and the way of advance to more fruitful intellectual territory will be cut off, if the classical theory is regarded as the last and final stage of economic thought and the problem of « lapses from full employment » (as Pigou has called it) is treated as non-existent or of only secondary importance. Then, indeed, will economic theory lose its power to shape and direct policy for it will be faced with situations to which it is not applicable. We could, of course, refer to the Great Depression of the '30's as an example. We could, of course, again call attention to Röpke's admission that such a situation could not be properly understood by the old economics. If we today have a better understanding of the market economy than 20 years ago, and are better equipped against the ups and downs of the trade cycle, we owe this to the theoretical achievement of Keynes, which has made economic science again a really effective instrument of policy and a decisive factor in our society. There can be no better proof of the practical value of Keynes' analysis than the fact that it is applied today by representatives of quite different political tendencies.

There can really no longer be differences of opinion on these topics among those who have followed professionally the development of economic theory. Can we really speak of the need for a « peace formula » between representatives of the « New » and the « Old » economics which has still to be worked out? Röpke holds that for such a peace formula two concessions must be made by the representatives of the « New » economics: first, that the « New » economics is today simply a technique of thinking, and secondly, that the Keynesian ideology is responsible for the inflationary tendencies existing in many countries. On the first point we would simply say that the General Theory is a *theory* which sets out the determinants of national income and employment. *A theory is always a technique of thinking.* Schumpeter or Eucken surely made that finally clear. The second point has already been discussed. « Keynesism » as an ideology is here, wrongly, identified with the stagnation thesis, which, as we showed, has nothing to do with Keynes' theory. Where, then, are the points of difference? Is there any longer any sense in speaking of an « Old » and « New » economics where the « New » economics does not contradict the « Old » but only extends it? Economic theory consists (and here we return to the starting point of this paper) in an organon of propositions which are valid under various assumptions, and which are applicable to the extent to which the assumptions correspond with the actual economic situation. Economic propositions are true or false. It is, therefore, only significant to distinguish between false and true theories. What

(98) *General Theory* etc., p. 257. See also p. 297: « The object of our analysis is not to provide a machine, or method of blind manipulation, which will furnish an infallible answer, but to provide ourselves with an organised and orderly method of thinking out particular problems ».

(99) « It is thanks above all to the work of J. M. Keynes, the significance of which for theory and policy is scarcely less than Adam Smith's Wealth of Nations, that we have today a clearer understanding of the laws of motion of modern economies than was afforded us by the classical liberal theory, and, further, that the study of public finance has again become what at one time it was, and what from its subject and tasks it can claim to be: the central core of political economy ». F. Neumark, *op. cit.*, p. 621.

(100) Quoted in the report by Rittershausen.

Keynes did was to add to the already true propositions of economic theory new and true propositions and new techniques of analysis.

These propositions and techniques of analysis must be mastered by all economists. If some people find this difficult for one reason or another, they must remember that in science, as Madame Curie said — the subject is everything and personal elements count for nothing. In our article (in « der Zeit » of 23/8/1951) from which we have already quoted, we proposed that « no one should use the name of Keynes who had not, at least in the previous month, carefully studied one of his theoretical works ». If this proposal was adopted, it would contribute much to the removal of the misunderstandings which unfortunately are still to be met with today. The way would then be free for work on the really controversial questions of contemporary economics, questions which to-day reach far beyond the original presentation of Keynes' work, but which cannot be approached without a knowledge of that work (101).

(101) « The new environment of the post-war period has sent us upon a new search for an acceptable " complex of suitabilities "; and Keynes' theory, as theory, is becoming rapidly submerged ». (WILLIAMS, *op. cit.*, p. 10).

The Relationship of Savings to Some Important Variables in the Business Cycle

by

MONTGOMERY D. ANDERSON

I

The cash savings of an individual are by common-sense definition equal to the difference between his cash income and his cash expenditures. Thus if a salaried man with no property income received $ 500 cash for his services in a given month and expended a total of $ 400, he would consider that he had saved $ 100 in cash that month. His *rate* of cash saving at any given moment, t may be designated by $s(t)$, while his rate of cash income and rate of cash expenditures at the same moment may be represented by $i(t)$ and $x(t)$ respectively (1). All three of these variables will be of the dimension dollars (or lire, etc.) per period of time. Then, from the common-sense point of view, one may write

$$s(t) = i(t) - x(t), \qquad [1]$$

which states algebraically that the rate of cash saving at a given moment is equal to the difference between rate of cash income and rate of cash expenditure.

Now, if any given individual, natural, corporate, or governmental, does not bring precious metal to the mint, does not print paper money, and does not borrow or lend (or steal), then his cash savings will be equal to the increase in his stock of money. If $m'(t)$ represents the rate of increase of his stock of money then under the stipulated restrictions one may write the following equation:

$$m'(t) = s(t) = i(t) - x(t). \qquad [2]$$

Let $m(t)$ be a continuous function of time with continuous derivatives which approximates the amount of money an individual has at any given moment. The existence of this function is, of course, implied by the use of $m'(t)$ in formula [2], because $m'(t)$ in the instantaneous rate of change of m. Let α be a variable function of time which is *defined* by the following definite integral:

$$m(t) = \int_{t-\alpha}^{t} i(t)\,dt, \qquad [3]$$

while restrictions above are maintained.

Formula [3] requires the cash income (*i.e.*, the rate of receipt of cash, under the restrictions) to be integrated backward in time from any given moment, t until such time is reached that the accumulation of past receipts of cash is exactly equal to the stock of money held by the individual at time t. This lower limit

(1) In strict logic most individuals do not have a continuous rate of cash income, as is implied by writing i as a function of time t, because they receive their cash in « lumps » at intervals of time, with no receipts at all during the interval. However, one may conceive an individual to have a *constructive* rate of cash income which is a continuous function of time in this fashion: accumulate all the cash income of the individual from birth to any given time, listing a value for each date on which money was received. Now fit a smooth curve to this accumulated series and differentiate the curve. The resulting derivative will be a continuous function of time, and its value at any given moment may be said to represent the constructive rate of cash income at that moment for the given individual, in the sense that the definite integral of this function over any considerable duration of time will give a close approximation to the amount of cash received by the individual during the period of time covered by the integration.

From similar considerations one may conceive an individual to have an instantaneous rate of expenditure of cash. The difference between these two rates will give the rate of cash saving for the individual in the sense that the definite integral of the difference between the two functions of time, when taken over any considerable period of time, will approximate the difference between cash income and cash expended.

of the integral is designated by $t-\alpha$, and α is thus defined as the interval of time over which the integration must be carried out in order to reach the result demanded by formula [3].

A little thought will show that α is of the nature of the duration of time that the individual holds his money before spending it. Since money (cash) is essentially homogeneous, one may think of it as passing through the hands of an individual according to the rule of « first in, first out ». Then, so long as the rate of cash expenditure has any positive value, the interval α can be thought of as the length of time the dollar just about to be expended at time t has remained in the possession of the given individual (2). Under the rule stated, whatever cash was on hand at time $t-\alpha$ has been « pushed out » of pocket (or bank account) by the money that was acquired between time t and time $t-\alpha$. The dollar just about to be spent at time t was acquired at time $t-\alpha$.

Whether or not money really does follow the rule of « first in, first out », *i.e.*, whether people do in point of fact put incoming currency in the bottom of their wallets, and spend from the top is wholly immaterial to the argument of this paper. In any case the interval α has the conceptual properties of a *period of turnover* of money, and the hypothetical rule of inventorying was invoked above merely as an aid to understanding by the reader.

The rate of change of an individual's stock of money, $m'(t)$, is given by taking the derivative of m with respect to time, *i.e.*, by differentiating formula [3] above. This gives the following result:

$$m'(t) = [i(t) - i(t-\alpha)] + [\alpha' i(t-\alpha)] = s(t), \quad [4]$$

where α' is the rate of change of α.

The assumed prohibitions against borrowing, printing money, etc., are still in effect in the argument, and therefore the rate of increase of the individual's stock of money is equal to his rate of cash saving $s(t)$.

Formula [4] expresses the value of cash savings in terms of cash income, the period of turnover of the individual's money, and the rate of change of that period of turnover. It is explicitly independent of the rate of cash expenditure because the effect of this variable has been implicitly subsumed by the behavior of α and α'.

Be it noted that the common-sense definition of cash savings has been transformed by equation [4] into two very different economic activities, the dollar values of which are given by the terms contained in the pair of brackets on the right-hand side of equation [4].

This equation shows there are two very different ways in which an individual can save money. On the one hand he can bestir himself and increase his cash income. The rate of cash saving produced by this form of action is given by the first bracket in formula [4] because it evaluates the difference between rate of cash income at the given time t and the rate of cash income at an earlier time, $t-\alpha$. The other way an individual can save money is to be more sparing in the use of the money which he has; in other words hold his money a longer time before spending it. The rate of cash saving produced by this procedure is evaluated by the second bracket in formula [4] because it has a value equal to the product of the rate of change of the period of turnover of the person's money multiplied by the rate of cash income at time $t-\alpha$. Increasing the period of turnover of cash will increase cash savings, ceteris paribus, because there is a plus sign in front of the second bracket, and the sign of α' will be positive when α is increasing.

The restrictions against borrowing, etc., are still maintained in the argument. In that case it has been demonstrated mathematically that the cash savings of an individual are *always* a function of the period of turnover of his money because this variable appears in *both* the bracket terms of formula [4]. Should an individual's cash income be constant then his rate of cash saving becomes *entirely* a function of the period of turnover of his money and the rate of change of that period because the

(2) Since the accumulated expenditures data will be increasing monotonically there will be no points in time at which the derivative of the fitted curve of expenditures will not be positive. In other words the individual will always be spending at least a little money according to the constructed function $x(t)$ even though in reality he may go several days without any expenditure.

first bracket term in formula [4] vanishes, and the following special case obtains:

$$m'(t) = s(t) = \alpha' \beta \qquad [5]$$

where β equals the constant cash income. With cash income constant variation in cash savings is wholly determined by variation in the period of turnover of money. Let u be the *rate* of turnover (or velocity) of an individual's money. There are several ways in which u might be evaluated. One logical way is to define u as the *reciprocal* of the period of turnover of money, α. In that case formula [5] becomes

$$m'(t) = s(t) = \frac{-\beta u'}{u^2} \qquad [6]$$

where u' is the rate of change of the rate of turnover of an individual's money. Thus in the case where cash income is constant the cash savings of an individual are an inverse function of the rate of change of the velocity of his money. Since u itself is always positive the sign of the cash savings will be the reverse of the sign of u'. If an individual increases the rate of turnover of this money while his cash income is constant his cash savings will be negative. This, of course, is just common sense.

II

In order to evaluate the total value of the cash savings of all persons, natural, corporate, and governmental, let upper case letters be employed to match the lower case letters used for individuals. Then by analogy with formula [1] the rate of cash savings of all persons would be written as

$$S(t) = I(t) - X(t). \qquad [7]$$

These aggregates are, of course, continuous functions of time and it is not necessary to employ a set of constructs in order to give them continuity as was necessary in the case of an individual. The cash savings of every person in the aggregate will, of course, always be zero by virtue of the fact that $I(t)$ is identically equal to $X(t)$. Every dollar of cash income received by one person must have been expended by some other person: hence $I(t) = X(t)$.

In a society of traders where no new metal is coined, no paper money is printed, and no derivative bank deposits are created the rate of change of total stock of money will also be zero, neglecting currency that is lost or melted.

But in a society wherein these restrictions are removed the rate of change of total stock of money may show a positive value while the cash savings are still zero. That is because without the restrictions cash *receipts* may be larger than cash income. Let $Z(t)$ represent the aggregate rate of cash receipts, and let M equal the total stock of money (cash). Then by analogy with formula [3] one may write the following equation:

$$M(t) = \int_{t-A}^{t} Z(t)\, dt. \qquad [8]$$

From considerations similar to those used to explain the meaning of α in formula [3] it may be seen that A is the average period of turnover all money including money received from sources other than income. The rate of change of total stock of money, M' is given by differentiating formula [8] with respect to time, viz.,

$$M'(t) = [Z(t) - Z(t - A)] + [A' Z(t - A)]. \qquad [9]$$

where A' is the rate of change of the average period of turnover of all money.

Now put the familiar restrictions back into the argument and revert to an imaginary society in which there is no change in the quantity of money by virtue of the assumed restrictions. In that case $Z(t) = I(t)$; *i.e.*, aggregate cash income equals cash expenditures. Hence, the aggregate rate of increase of money $M'(t)$ equals the total rate cash saving $S(t)$ because both these aggregates are equal to zero. Hence in this imaginary country one may substitute $S(t)$ for $M'(t)$ in equation [9], viz.,

$$S(t) = [Z(t) - Z(t - A)] + [A'Z(t - A)] = O. \qquad [10]$$

Since Z, the rate of receipt of cash for all traders, is always greater than zero it follows that the algebraical sign of the net value of

the terms in the first bracket is always opposite to the sign of the net value of the second bracket in formula [10], that is to say so long as one maintains the restrictions against the creation of money. Algebraically stated [10] signifies that

$$Z(t) - Z(t - A) = - A' Z(t - A). \qquad [11]$$

Thus for traders as a whole the aggregate cash savings achieved by one type of economic operation are always exactly defeated by and canceled out by another type of operation, either one of which would increase total cash savings, *if* it could be done without the other. But one type of operation implies the existence of the other economic effect *somewhere* in the economy. If a given trader saves cash by holding his money a longer time before spending it — thereby causing his individual contribution to the second bracket in formula [10] to be positive — he will automatically cut down on the cash income of some of the people from whom he buys. This will make a negative contribution to the aggregates contained in the first bracket term. Thus the positive saving of the first mentioned person will be exactly canceled by negative saving on the part of the last named group of persons *unless* they in turn decrease the rate of turnover of *their* money and thereby cause a negative saving for still other persons. Somewhere down the line the cycle must balance out, but it may be a long way down the line.

Thus one comes to understand why a vicious circle or chain reaction tendes to perpetuate a business depression once it gets started. Each trader tries to protect his cash balance — at some point of resistance — from the inroads made upon it by the cash savings of other traders. Thus is instanced one of the great paradoxes of a money economy: that a perfectly legal operation which enhances a given individual's wealth may detract from that of his neighbor's.

The most important conclusion of the foregoing analysis is that the common-sense definition of cash savings turns out to be not very sensible when applied in the aggregate because (a) it is identically equal to zero in the aggregate, and (b) because it is composed of two quite heterogeneous and antithetical operations even for the individual case.

As an alternative to the common-sense definition (cash income minus cash expenditures) one might define the cash savings of all traders as a value equal to the rate of increase of their cash holdings, M'. Aggregate cash savings would then be equal to new metals minted plus new currency printed plus the net change in derivative bank deposits minus coin and currency lost. In a modern society such definition would make the value of cash savings for all traders depend almost entirely on treasury and bank policy. Therefore, this alternative definition does not seem to be very sensible or very useful.

The most sensible and useful way to define aggregate rate of cash savings would be to identify it not with the *whole* rate of increase of stock of money M', but rather with *that part* of the rate of change of stock of money to which a positive value is contributed by the second bracket in formula [9]. This bracket evaluates the increase in cash holdings which is brought about by economizing in the use of cash, *i.e.*, by lengthening the average period of turnover of money. The *other* part of the whole rate of increase of aggregate stock of money, which is evaluated by the first bracket in formula [9], could be called the rate of *new cash income*. Under the definitions just stated total cash savings would measure the aggregate effect of homogeneous individual operations rather than the aggregate effect of heterogeneous and conflicting operations, as in the case of the common-sense definition.

Moreover, there could be either positive or negative cash savings in the aggregate without any change in the total stock of money, *i.e.*, in the case where $M' = O$. To say that a *part* of nothing could be positive is, of course, perfectly good mathematical logic. The other part — the new cash income — would be negative and of the same numerical value, in that circumstance. But when there is an increase of total stock of money cash savings and new income *could* both be positive as far as the mathematics are concerned.

However, even when the restrictions against printing paper money, etc., are relaxed, so that M' is not necessarily zero it still remains true

that the two bracket terms in formula [9] represent opposing economic tendencies to a large extent. In practice these two bracket terms tend to have opposite signs in the aggregate. Thus when new cash income is positive and business men are optimistic because of this fact the cash savings bracket will usually be negative. Under the optimistic impulse the propensity to spend increases, the period of turnover of cash decreases and cash savings as defined by the second bracket term in equation [9] will usually be negative.

A definition of cash savings for the individual would be obtained by substituting lowercase letters for the capital letters in formula [9]. The ordinary person could never be persuaded to apply this formula to compute his cash savings. But neither can the ordinary individual analyse any scientific phenomenon accurately and with the most functional definitions. The scientist — the economist — need not be deterred by the fact that his mode of thinking is not that of the layman, although to be sure the economist does have to make himself understood by the layman more often than does the physicist, for example. The ordinary person will continue to calculate his cash savings by taking the difference between cash income and cash expenditures.

But in case the said ordinary individual should happen to have a fixed cash income, and neither borrow money nor steal it, then *he will unwittingly compute his cash savings as defined by the second bracket of formula* [9], because in that case the common-sense formula will by identical with the second bracket term in formula [9].

However, for the economist to apply the proposed definition in appraisal of the cash savings of an individual or corporation he would in general need to use more elaborate statistics than required by the common-sense definition (3). This is admittedly a handicap, but it should not be controlling because the proposed new definition has one overwhelming advantage, to-wit, that it is not identically equal to zero in the aggregate and therefore is not completely meaningless for society as a whole, as is the conventional definition.

The proposed new definition of cash savings has a secondary advantage that is nearly as great as the first one; namely, that it does not lump together two economic operations which are essentially different for the individual and in the aggregate.

The mathematical antithesis existing between new cash income and cash savings as defined in this paper may be revealed very neatly by factoring the Z term in formula [9] into the product of M, the total stock of money, and V its average velocity, where V is defined as Z/M. In that case formula [9] becomes

$$M'(t) = \left[\int_{t-A}^{t} M'(t)V(t)dt + \int_{t-A}^{t} V'(t)M(t)dt\right] + [A'Z(t-A)]. \quad [12]$$

where V' is the rate of change of V with respect to time.

The average rate of turnover of money as measured by V will not in general be exactly the same as the average rate of turnover obtained by taking the reciprocal of A, the average period of turnover of money. V and $1/A$ are in general slightly different concepts of average velocity. However V will always vary inversely with respect to A; so the algebraical sign of V' will always be opposite to that of A'. The second integral in the first bracket of [12] and the second bracket each evaluate numerically the contribution of changes in rate of turnover of money to increase of cash receipts while total money remains constant. The former evaluates this contribution positively and the latter reversely. Hence the second integral in the first bracket always cancels out exactly the second bracket. This shows the antithetical nature of the first and second brackets. While not completely antithetical they are inevitably opposed to a certain extent because the first contains a term which is identically equal to the second bracket, but of opposite sign, unless they are both equal to zero.

The only thing which prevents new cash income from being completely antithetical to

(3) A fairly quick way to compute the approximate cash savings of an individual or firm whose income is variable would be as follows:

1) Compute the increase of cash during the period.

2) Estimate the period of turnover of the firm's money at the moment ending the perod.

3) Using this estimate compute the new cash income for the period as evaluated by the first bracket in formula [9].

4) Subtract 3) from 1).

cash savings as defined in this paper is the presence of the first definite integral in the first bracket. This integral evaluates the rate of receipt of new money and must always be of equal value and of the same sign as the rate of change of stock of money, M'. In other words the rate of increase of money is the same thing as the rate of receipt of new money when « new » money is considered to be the gain in stock of money over the interval A. The first integral in formula [12] indicates that the increase in money is turning over because it imparts a constructive rate of turnover to the term M' equal to the rate of turnover of old money and then quietly cancels out this multiplying effect of the V by integrating the product over the period A, leaving just M' after all (4).

So one can see that when cash savings are positive new cash income will *have* to be negative *unless* the stock of money is increasing, and increasing sufficiently for the first integral in the first bracket of formula [12] to overcome the negative effect of the second integral.

This last is true for the individual as well as for society as a whole. But it does not mean the individual cannot increase his stock of cash by saving money in the way it is defined by this paper. If he saves cash by this definition, he will slow down the rate of turnover of his money. If at the same time he manages to hold his cash receipts constant, all *three* of the major groupings in formula [12] will be numerically equal, and his increase of cash will be due entirely to the savings operation, provided he does not borrow or print money, etc. Although the savings operation of the individual will be canceled exactly by the effect measured by the second definite integral in formula [12] the operation will give rise to a positive value in the first definite integral which is uncanceled and will be numerically equal to the increase of cash. In this special case M', the first and second integrals and the second bracket all have the same numerical value, and cash savings equal increase of cash for the individual, subject to the familiar restrictions.

(4) Where M' is constant it is easy to show that the value of the first integral in formula [9] equals M'. In that case the value of the first integral becomes equal to

$$M'V(\Theta)\int_{t-A}^{t} dt = M'V(\Theta)A,$$

where $V(\Theta)$ is the simple arithmetic mean value of V during the interval t to t-A. Obviously $V(\Theta)A = 1.00$ because the average speed of an express train while in a semaphore block must equal the reciprocal of the time it takes to run the block. Hence $M'V(\Theta)A = M'$. If M' is not constant the proof is a little more complicated. Since the first integral in formula [9] is equal to M' it follows the sum of the second integral and the second bracket must equal zero, *i.e.*, the last named terms must be of opposite sign or both zero.

III

The word « investment » in economic parlance has come to be synonymous with what the accountants would call « additions to investment during the accounting period ». To the accountant the investment of a firm at the close of a period is the total amount of invested capital (less depreciation, etc.) as of that date. When the modern economist speaks of investment in business cycle theory, he usually means the value of additional money invested in capital during some period of time. So conceived, the word investment becomes identical with the phrase « net increase of capital ». And, of course, if the capital is valued at cost less depreciation, which is standard accounting procedure, the net increase of capital must be the same thing as the *purchases* of new (additional) capital goods because a thing cannot acquire a pecuniary cost value unless and until it has been purchased. So one may use the terms, investment, net increase of capital and purchases of new capital more or less interchangeably.

The classical conception of the value of savings in goods identifies it with investment, *i.e.*, the value of savings in goods is defined in such way as to make it exactly equal to the *whole* increase in value of goods capital; just as the common-sense definition of cash savings makes this term exactly equal to the whole increase of cash where there is no borrowing or lending, etc. But the argument has been made in this paper that for analytical reasons it is preferable to define cash savings as

only a certain *part* of the increase of cash thereby separating the savings-in-cash concept from new cash income, with which it is merged by the common-sense definition. An analogous argument can be made that it is preferable for economic analysis to identify goods savings not with the whole increase in value of goods capital but only with a part thereof; namely, the part which is not accounted for by new goods income. In that case, goods savings will not equal investment except in the special case where there is no new goods income. No doubt the late Lord Keynes had some dim, intuitive perception of this point of view when he wrote the following in his *Treatise on Money*:

« It might be supposed — and has frequently been supposed — that the amount of investment is necessarily equal to the amount of saving. But reflection will show that this is not the case...

« That saving can occur without any corresponding investment is obvious, if we consider what happens when an individual refrains from spending his money income on consumption... The savers are individually richer by the amount of their savings but the producers who [may] have sold their current output at a lower price than they would have got... are poorer by an equal amount » (5).

The bracketed word « may » was inserted by the present writer because without this word the quotation implies that new goods income must always be insufficient to offset savings, which is not true.

The argument can be put more succinctly and precisely by the use of fairly simple mathematical notation. Let $Y(t)$ represent the total value of all goods capital at time t, valued at cost less depreciation, and let $Z(t)$ represent the rate of purchase of goods capital in the aggregate at the same time. Y will be of the dimension dollars (or lire, etc.) while Z is of the dimension dollars (or lire, etc.) per period of time. Then the variable $K(t)$ may be defined by the following definite integral:

$$Y(t) = \int_{t-K}^{t} Z(t)dt. \qquad [13]$$

From considerations analogous to those involved in the discussion of the meaning of α in formula [3] above, K will be recognized as a constructive average period of turnover of all goods capital. Goods are not homogeneous, like money is, but each separate kind of good may be said to have a period of turnover, say k, and the capital K in formula [13] can be thought of as a weighted average of all the various $k's$ (6).

The variable K is said to be a *constructive* period of turnover because it includes the constructive period of turnover of so-called fixed capital as it is worn out and charged to depreciation. K also includes the constructive period of turnover of such capital as coal which, *in effect*, « turns over » as it is burned up in the creation of other goods. All forms of goods capital have a period of turnover in a constructive sense even if title to them may never change hands. In any case there is a period of elapsed time between the date on which they are acquired by a given firm and the date on which their value has been completely charged off the books and charged into the value of goods sold or to be sold by the firm.

Differentiation of formula [13] will give the value of $Y'(t)$, the instantaneous rate of increase of total goods capital, viz.,

$$Y'(t) = [Z(t) - Z(t-K)] + [K'Z(t-K)] \qquad [14]$$

where K' is the rate of change of the average period of turnover of all goods capital taken with respect to time. K' is of zero dimension, a pure number.

The familiar pair of brackets reappear and serve notice that investment, or the increase in value of goods capital, like the increase of money capital, is brought about by one or both of two quite different operations. In the case of investment these two operations are (a) increasing the rate of purchase of capital, and (b) economizing in the use of existing capital,

(5) J. M. Keynes, *op. cit.*, I, 172-4. The lamented baron repudiated this point of view in his later works and in his *General Theory* even executed an about-face by stating flatly that savings must always be equal to investment.

(6) It can be shown that K is approximately equal to $\Sigma R_i z_i / \Sigma z_i$, where the z_i are rates of purchase of each kind of good.

which means to make it last longer. The increase of capital effected by the first kind of operation is evaluated by the first bracket in formula [14], while the increase effected by the second kind of operation is evaluated by the second bracket. If a trader holds his rate of purchase of capital constant then the only way he can increase his goods capital is to make his capital last longer, in other words increase the average period of turnover of his capital. This will reduce the rate of outflow of capital and increase the capital owned while input remains constant. The mathematical effect of this kind of action will be registered in the aggregate by the second bracket in formula [14]. On the other hand if a trader keeps his goods capital moving at the same average rate of turnover then the only way he can increase his goods capital is to increase his rate of purchase of goods, and the aggregate economic effect of such activity is registered by the first bracket term in equation [14]. These two methods of increasing capital are largely antithetical and a more trenchant economic analysis is permitted if they are not merged in the single concept of « savings » as is done by the classical systems of thought.

A more sapient analysis of business fluctuations is permitted if the aggregate rate of goods savings is defined as only *that part* of the rate of investement (rate of increase of capital) which is represented by the second bracket in formula [14] just as the aggregate rate of cash savings has been defined by the second bracket in formula [9]. Aggregate savings in goods will then be identified as that part of aggregate net investment which is contributed by those traders who increase their capital by increasing its period of turnover while holding their input of goods constant. The other bracket in formula [14] can be designated suitably as « rate of new goods income ». Thus the aggregate rate of investment will be equal to the total rate of new goods income plus the total rate of goods savings. Investment will be equal to goods savings only in the special case where there is no new goods income.

The fact that the first and second brackets in equation [14] are to some extent antithetical may be demonstrated by expanding the first bracket. Let $Z(t)$ be factored into the product of $Y(t)$ the aggregate value of goods capital, and $R(t)$ its average rate of turnover, where R is *defined* as the quotient of Z divided by Y. R is of the dimension times per period of time. Upon making this substitution and certain adjustments in formula (14) it reads as follows:

$$Y'(t) = \left[\int_{t-K}^{t} Y(t)R(t)dt + \int_{t-K}^{t} R'(t)Y(t)dt\right] + [K'Z(t-K)], \quad [15]$$

where R' is the rate of change of R with respect to time. R' is of the dimension times per period of time per period of time. While R is not in general exactly equal to the reciprocal of K, the average period of turnover of all capital, R will tend to vary inversely with K, and the rates of change of R and K will always be of opposing sign. In fact R and K will behave in such way that the value of the second integral in the first bracket of formula [15] will always be numerically equal to and of opposite sign to the value of the second bracket (7). Thus a positive savings in goods by the proposed new definition will always have a negative effect on new goods income, *i.e.*, positive savings will always *tend* to cause a reduction in aggregate goods income. It was this sort of thing which Lord Keynes apparently had in mind when he noted the paradoxical nature of saving from the social point of view in the passage quoted above. But savings will not *necessarily* cause new goods income to be negative because of the presence of the *first* definite integral in the complete expression for new goods income. If the value of this integral

(7) The easiest and perhaps the only way to prove this statement is true is to first prove that the first integral in equation [15] is exactly equal to Y', the variable on the left-hand side of the equation. This being so all the terms taken together on the right-hand side which are not included in the first integral must sum to zero. Since there are only two more terms, namely the second integral and the second bracket, they must be equal and of opposite sign. Proof that

$$Y'(t) = \int_{t-K}^{t} Y'(t)R(t)dt$$

would follow along the lines indicated in proof of the analogous theorem with respect to increase of money as given in footnote (4) above.

is positive and sufficiently large it can more than offset any reduction of goods income caused by goods savings. This first integral in the first bracket obviously evaluates the rate of purchase of new goods capital. It is equal at all times to the rate of increase of capital or rate of investment. This integral imparts a constructive rate of turnover to the new capital by multiplying Y' by R, which multiplication implies that additions to capital are in general turning over at the same rate as « old » capital. Then this multiplying effect is exactly canceled, dimensionally and numerically, by integrating the product over the interval K.

If a hermit valued his capital at say, cost in labor hours, he might have a positive value for Y', his rate of increase of capital; but he would have no rate of purchase of new capital because R would be zero for him. For him the first integral in formula [15] would be meaningless and so would the whole equation. But in an exchange economy, nearly all capital is in motion between traders and the first integral in the equation measures the rate of exchange of new capital over an interval of time just sufficient to make it equal to the rate of increase of capital. If one were to integrate the expression $Y'(t)R(t)$ over an interval of time *other* than the period K, the resulting definite integral would still evaluate that part of the increase in rate of goods income over the given interval which is produced by the use of new capital, but it would no longer be equal to the rate of increase of capital.

The second integral in formula [15] evaluates that part of the increase in rate of goods income over the interval K which is caused by variation in rate of utilization of existing capital. As pointed out before this part will be negative when goods savings are positive, and this part always cancels out exactly the effect of goods savings upon investment *except* in so far as the goods savings may have a positive effect upon the first integral in the first bracket of formula [15] by virtue of economic considerations. There is no reason from the purely mathematical point of view why traders should not increase their capital by the exact amount of their savings in goods as defined in this paper, in spite of the presence of the inverse of savings in equation [15]. Thus, equation [15] above might conceivably have the following statistical evaluation (8):

Investment = Purchases of New Capital
+ $ 20 Billion + $ 20 Billion

+ Inverse Savings + Savings
− $ 20 Billion + $ 20 Billion

In that case new goods income will be zero and the entire investment would be achieved by savings operations. It is quite possible to increase capital by slowing down its rate of utilization while holding input of goods constant, and many individual firms do accomplish an increase of capital in this manner.

IV

But *in the aggregate* the first integral in equation [15] and the second bracket appear to have opposite signs most of the time, because of psychological considerations and the paradoxical effect of savings as noted by Lord Keynes. In short, aggregate goods savings are generally negative when investment is positive and vice-versa. When investment is positive there generally exists an atmosphere of business confidence and optimism, and under this stimulus people tend to turn capital over in a shorter rather than a longer time, which means savings become negative rather than positive.

The proposed new definition of goods savings will impose additional burdens on the statistician and upon the popular understanding; but it has a tremendous advantage for econo-

(8) In strict logic Y' in formula [15] is not the investment of a given period, but the rate of investment at a given moment. The actual investment of a finite interval ε, ending at time $t=\tau$ would be given by taking the definite integral of Y' over that interval. Similarly, the savings of an interval of time equal to ε would be given by the following double integral:

$$-\int_{\tau-\varepsilon}^{\tau}\int_{t-\varepsilon}^{t} R'(t)\,Y(t)dtdt.$$

Compare this writer's *La Dimensione del Tempo nella Misura del Risparmio*, nel « Giornale degli Economisti e Annali di Economia », gennaio-febbraio, 1951.

mic analysis; namely, that it calls sharp attention to the cardinal paradox of modern economic life under a free-enterprise system. This cardinal paradox is as follows: that while an individual can, and often does increase his capital by conserving its rate of utilization, in the aggregate a nation does not expand its wealth so much by this method as it does by employing existing capital freely in the exploitation of new resources and the creation of new income. The business, financial and political leaders of the free nations must come to grasp and understand the egregious difference between individual savings and savings in the aggregate if the free enterprise system is to survive.

The Minister of the Treasury's Survey of the Italian Economic Situation in 1952

by
VERA LUTZ

Signor Pella in his most recent annual report (1), the fourth in the series, provides us with the latest national income figures for Italy (2). As Signor Pella has continually emphasized in his earlier reports, the figures must be regarded as rough approximations only, and we must exercise caution in basing conclusions on them, particularly on the figures for the absolute income level. These are most probably subject to a large margin of error, although he believes that the figures may be taken as fairly indicative of the order of magnitude of the movements from year to year. With these qualifications in mind we may examine the principal data for 1951 and 1952 given in this report, supplemented by those for 1950 given in the report of the previous year (3).

We commence with the summary of the national income statistics, as shown in Table I.

These figures indicate that the gross national income at current market values rose by about 16 per cent from 1950 to 1951, and by 5 per cent from 1951 to 1952. The prices used in calculating the money value of the national income were, for the part that was consumed (forming about 80 per cent of the total) the average level of retail prices for consumption goods and services in each of the successive years, and, for the part that was invested, the average level of wholesale prices of capital goods. When the effect of the changes in these prices is eliminated, the increment in the gross national income in real terms appears to be much smaller than the increment in money terms from 1950 to 1951 and slightly smaller also from 1951 to 1952. The estimates indicate that real income rose by about 6 per cent from 1950 to 1951, and by between 2 and 3 per cent from 1951 to 1952.

The figures for the *net* national product in 1952 (see Table I) divided by a population of 47 million gives a net income per head amounting to slightly less than 200,000 lire (equivalent to about 300 dollars). This figure has, however, for the reason already given, to be accepted with reserve.

Although we have no statistics concerning income distribution, and its changes since 1938, the figures for the movement of real wage rates in certain sectors of the economy are sufficient to indicate that, since certain groups have obtained increases in real wage rates far exceeding the estimated increase in average real income per head, other groups must have suffered a considerable diminution. These figures show that workers, both in agriculture and industry, have made substantial gains, while clerical employees in industry, and state employees have failed to maintain the pre-war level. A rough mea-

(1) *Relazione generale sulla situazione economica del paese, presentata dal Ministro del Tesoro (Pella) alla Presidenza il 31 marzo 1953* (*Atti Parlamentari, Camera dei Deputati*, Doc. IX, No. 4).

(2) In this article we summarise the data relating to national income and expenditure and the balance of payments. For accounts of developments in other sectors, more detailed balance of payments statistics, and a fuller analysis of the factors affecting the recent development of the economy as a whole, we await the more ample report of the Bank of Italy.

(3) We may recall that in his report for 1950, Signor Pella indicated that by 1950 the real national income per head had recovered to a point where it was equal to or above the level of 1938. That is to say, the aggregate real income had risen sufficiently from the extremely low level reached in 1945 (when it was estimated at being only about one half the pre-war level) to provide for the increased population (the latter having risen from 43 million, on the present territory, to 46.5 million, or by about 8 per cent) at the same average real income level as prevailed in 1938. The recovery of the average hides, however, considerable disparities between different groups due to changes in income distribution (see p. 36 below).

NATIONAL INCOME: SUMMARY (a) TABLE I
(Milliards of lire)

	1950	1951	1952
1. Net product at factor cost . .	6,370	7,380	7,657
of which:			
(a) private sector	(5,903)	(6,934)	(7,191)
(b) public administration . .	(695)	(756)	(885)
(c) *less* allowance for duplications between public administration and private sector	(– 228)	(– 310)	(– 419)
2. Central and local government taxes not included in the valuation of goods and services . .	1,057	1,257	1,366
3. Net product at current market value [(1)+(2)]	7,427	8,637	9,023
4. Net income from abroad (b) .	216	114	166
5. Net national income at current market value [(3)+(4)] . . .	7,643	8,751	9,189
6. Depreciation and maintenance .	680	872	916
7. Gross national income at current market value [(5)+(6)] .	8,323	9,623	10,105

(a) In the absence of recent data obtained by more direct methods, the « values added » (gross products) and the net products (*i.e.* net of depreciation and maintenance) in the various branches of the industrial sector have been calculated by taking the gross and net products as they were determined in 1938 and multiplying them by the respective indices of production (given in Table VII below) and by the respective sectional indices of wholesale prices, as calculated by the Central Institute of Statistics. A Census of Production covering industry and commerce, and extending to quantities but not to values of output and of raw materials consumed was taken in November, 1951. The results of this census are still in process of elaboration.

The method currently used is recognised as depending on certain assumptions which would be perfectly valid only if the structure of industrial output had not changed. It assumes, that is,

(1) that the ratios between the values added, the net products and the total values of production as ascertained for 1938 are still relevant today,

(2) that the index of industrial production for each sector reflects the changes in the total net product of that sector, and

(3) that the sectional wholesale price index reflects the change in value per unit of that product.

(b) Includes income received *less* income paid on capital, emigrants' remittances, and grants from abroad. The tables do not account for the effect of the foreign balance, or, that is, of the surplus or deficit in the balance of payments *net of* foreign grants, which in the statistics of the United Kingdom, for example, is taken as signifying, according to whether it is a surplus or a deficit, that domestic consumption *plus* gross domestic capital formation either falls short of or exceeds total disposable income (or gross national expenditure at current market values). In Italy's case, since the excess of imports of goods and services over exports increased in 1952, the disposable income increased more than did the gross national product. The Bank of Italy, in its Annual Report for 1952 which appeared as this number of the *Quarterly Review* was going to press, indicates (p. 98) that since the increase in the trade deficit was 196 milliard lire and that part of this (namely the increase of 52 milliards in net income from abroad) is already included in the figure for gross national income, the amount still to be added in order to obtain the increase in disposal income in 1952 as compared with 1951 is 144 milliards.

sure (4) of the movement of real wage rates (calculated as money wage rates divided by the official cost of living index) for the classes indicated is given in Table II (5).

TABLE II

INDICES OF MOVEMENTS IN REAL WAGE RATES
(1938 = 100)

Annual average	Industrial workers		Clerical employees in industry		Agricultural workers		State employees	
	Single	Married	Single	Married	Single	Married	Single	Married
1948	108	108	79	82	136	133	64	67
1949	109	111	80	84	140	141	69	72
1950	113	120	82	88	143	144	76	78
1951	113	120	87	93	134	134	73	74
1952	113	128	86	96	135	135	75	77

Note: For married workers these figures include family allowances, and refer to a man with wife and three children.

Table III shows the way in which, over the last three years, the gross private domestic

TABLE III

GROSS PRIVATE DOMESTIC PRODUCT AT FACTOR COST BY BRANCHES OF ACTIVITY
(Milliards of lire)

	1950	1951	1952
1. Agriculture and forestry . .	2,150	2,308	2,304
2. Fishing	17	20	22
3. Mining and quarrying . . .	58	98	110
4. Manufacturing	2,283	3,014	2,929
5. Building	254	299	437
6. Electricity, gas and water . .	208	241	250
7. Transport and communication	465	515	582
8. Commerce, banking and insurance	978	1,057	1,151
9. Ownership of buildings . .	63	104	132
10. Services	300	331	370
11. *Less* allowance for duplications	– 199	– 205	– 206
Total	6,577	7,782	8,081

product, calculated at factor cost (item Ia from Table I *plus* the relevant allowances for

(4) This measure does not, of course, allow for the fact that the different groups spend their incomes on different collections of goods and services of which the prices have not necessarily moved in the same manner.

(5) The figures given in the Pella Report have been supplemented by data obtained from the Monthly Bulletins of the Central Institute of Statistics.

depreciation and maintenance) is accounted for by the various branches of activity. From this it appears that agriculture, forestry and fishing still account for between a quarter and a third of the total, while manufacturing accounts for about 35 per cent.

Table IV gives the distribution of personal expenditure on consumers' goods and services

TABLE IV

PERSONAL EXPENDITURE ON CONSUMERS' GOODS AND SERVICES AT CURRENT MARKET VALUES

(Milliards of lire)

	1950	1951	1952
1. Food	3,903	4,371	4,633
2. Tobacco	270	287	308
3. Clothing, textile furnishings, etc.	996	1,200	1,145(a)
4. Rent	63	104	132
5. Fuel, light and water	141	155	168
6. Domestic, professional and personal services	290	306	326
7. Entertainments	83	94	104
8. Travel	115	130	140
9. Sundries	226	248	276
10. Durable consumers' goods	176	232	242
Total	6,263	7,127	7,474
Less duplications with respect to consumption by public authorities (b)	192	287	330
Total	6,071	6,840	7,144

(a) This figure is almost certainly an underestimate, for the reason given below (footnote to Table VII).

(b) Total expenditures of public authorities on consumers' goods and services in the years 1950, 1951, 1952 are shown as 631, 737, and 862 milliards, respectively, giving total expenditures, public and and private, on consumers' goods and services of 6,702, 7,577, and 8,006 milliards.

(calculated at current market values). The figures indicate the high proportion of the total spent on food — over 60 per cent. From 1950 to 1951 the expenditures on food rose by about 6 per cent in monetary terms, although this was due to the extent of 4.2 per cent to the increase in average food prices. Figures relating to quantities of individual food items indicate, however, that certain items increased very considerably: the dead weight of livestock slaughtered increased by some 12 per cent (6), sugar consumption by 6 per cent and coffee imports by 14 per cent.

Table V, which summarises the data on income, consumption and investment, indicates that gross investment over the last three years has on the average been running at about 20 per cent of gross income. The relatively small increase in income from 1951 to 1952 gives a correspondingly small increase in the absolute investment figure. Thus, whereas gross investment is shown as having increased by 26 per cent from 1950 to 1951, it appears to have increased by less than 3 per cent from 1951 to 1952. Since, however, the figures refer to investments including stocks, which rose in quantity and still more in value in 1951 while no such increase took place in 1952, we may conclude that the increase in *fixed* capital formation in 1952 was much greater than the figure just indicated. Indeed the figures in Table VI, which exclude stock movements, indicate a rate of increase which was in real terms (since in 1952 there was no such heavy increase in prices as occurred in 1951) fully equal to that of 1951.

TABLE V

NATIONAL INCOME, CONSUMPTION AND INVESTMENT: SUMMARY (a)

(Milliards of lire)

	1950	1951	1952
1. Gross national income	8,323	9,623	10,105
2. Consumption, private and public	6,702	7,577	8,006
3. Gross investment	1,621	2,046	2,099
(of which depreciation and maintenance)	(680)	(872)	(916)
Ratio of gross investment to gross income (per cent)	*19.5*	*21.3*	*20.8*

(a) Calculated as the difference between gross national income and consumption.

The data which the Report provides concerning the composition of these capital expenditures are rather scanty, though certain broad categories are shown in Table VI; no data are given concerning the physical movement of stocks. It is pointed out that in

(6) This was partly due to a special factor — the scarcity of fodder due to drought.

agriculture the gross investment in 1952 was due predominantly to land reclamation (made especially by the bodies responsible for carrying out the land reform and by the *Cassa per il Mezzogiorno*), and to investment in agricultural machinery. No increase is supposed to have taken place in the livestock population. Within the industrial sector, the metallurgical and mechanical engineering industries, the extractive industries (under which are included the drilling operations and construction of pipe lines connected with the exploitation of natural gas resources), the industries producing building materials, the chemical industries (including petroleum derivates), and electric power plants are said to have been responsible for the heaviest increments in investment. Investment in public works and building was particularly high in 1952, as Table VI shows.

GROSS CAPITAL FORMATION (a) TABLE VI
(EXCLUSIVE OF MOVEMENT IN STOCKS)
(Milliards of lire)

	1950	1951	1952
Agriculture	180	265	270
of which:			
Fixed assets	n. a.	(205)	(270)
Livestock	n. a.	(60)	—
Industry	570	700	780
Transport and communication	270	270	310
Public works and building	410	485	640
Other	90	115	120
Total	1,520	1,835	2,120
Ratio of fixed capital formation to gross national product (per cent)	*18.3*	*19.1*	*21.0*

(a) Calculated directly: the divergence between the total investment figure obtained by this method and the one obtained above (Table V) is considered as being mainly attributable to the fact that stocks are included in the latter and not in the former. The increment in stocks due to the increase in their quantity and still more to the increase in their value from 1950 to 1951 is estimated at about 200 milliard lire. It is presumed that in 1952 they did not increase and possibly fell owing to the decline in prices.

Certain supplementary information given outside the tables tells us that public investment (exclusive of military expenditures) may be roughly estimated to have accounted for some 550 milliard lire in 1951 and for some 650 milliards in 1952. This would mean that a larger proportion of total gross investment was attributable to the public sector in 1952 than in 1951: about 30 per cent as compared with 27 per cent. A complete accounting for the items of public investment is not attempted, although from certain fragments of information on this point, we gather that in 1952 public works, exclusive of those undertaken by the *Cassa per il Mezzogiorno* and by local authorities and the bodies concerned with carrying out the agrarian reform, accounted for 130 milliards, while investments in agriculture (again excluding those undertaken by the *Cassa* and by the bodies concerned with

TABLE VII

INDICES OF INDUSTRIAL PRODUCTION BY BRANCHES
(1938 = 100)

	1950	1951	1952
1. Mining and quarrying	101	119	143
2. Manufacturing:			
1) Food	135	143	146
2) Tobacco	128	128	134
3) Textiles	102	117	101
4) Footwear and other articles of clothing (a)	102	117	101
5) Manufactures of wood and cork	59	62	63
6) Paper	106	114	112
7) Printing and publishing	115	133	136
8) Leather	69	81	91
9) Rubber	132	152	141
10) Chemicals	114	153	147
11) Petroleum derivates	207	356	454
12) Manufactures of non-metallic minerals	119	128	136
13) Metallurgical	104	135	150
14) Mechanical engineering	123	130	141
15) Other	115	133	136
3. Building	140	148	192
4. Electricity, gas and water:			
1) Production and distribution of electricity	162	188	200
2) Production of gas	151	159	162
3) Distribution of gas	151	159	162
4) Distribution of water	151	159	162
5. Industrial services	120	138	143
Average	122	139	146

(a) In the absence of direct information on these classes, the index of textile production has been used. It is pointed out, however, that for 1952 the diminution in textile output was certainly not reflected in the output of clothing, since the contraction of the former was exclusively due to a contraction of exports. Thus it is to be presumed that the figure given underestimates the output in the clothing industry in 1952.

agrarian reform) accounted for 45 milliards, and those directly due to the activities of the *Cassa* for 67 milliards. These three items together amount to a total of 242 milliards, and we are given to understand that a good part of the remainder of the aggregate of public investment (of some 650 milliards) was constituted by subsidised building and by projects for increasing employment undertaken by the Ministry of Labour.

No statistics are available concerning the contributions of the various sources of finance to the total capital formation.

We turn next to the more detailed information about the expansion of production in industry — the area in which the expansion of the Italian economy since 1938 has mainly been concentrated. The average level for industry, including building, is shown to have risen by 14 per cent from 1950 to 1951 and by 5 per cent from 1951 to 1952 (see Table VII).

If we take the index of industrial production regularly published by the Central Institute of Statistics, which, however, excludes building (which expanded by a particularly large amount — some 30 per cent — from 1951 to 1952) we are enabled to trace the movement over the last five years.

This index (see Table VIII) indicates a considerable slowing down in the rate of industrial expansion in 1952 as compared not only with 1951, a year of especially rapid expansion, but also with the two previous years.

TABLE VIII

INDEX OF INDUSTRIAL PRODUCTION, EXCLUDING BUILDING

Year	Index (1938 = 100)	Increase over preceding year (Per cent)
1948	99	...
1949	105	6
1950	119	13
1951	138	16
1952	143	4

The figures showing the rates of expansion since 1938 in individual branches of activity (Table VII) indicate that the most marked advances of all were made in the manufacture of petroleum derivates and in the output of electric power. The latter reflects the effort made (partly under government and partly under private initiative) to increase the number of hydro-electric power plants, and the figure indicates that the output of electric power is now twice the pre-war level. This together with the exploitation of natural gas resources [which is included under the index for mining and quarrying (7)] represent a very important element in the post-war Italian economy, since they have helped to increase the supplies, from domestic sources, of fuel and power, which for some years threatened to be the bottleneck in the way of the progress of industrial expansion in Italy. The building index is also far above the general average. At about the average level, or somewhat above, are gas and water, the mechanical engineering and metallurgical industries, chemicals, and food products. Considerably below the average are textiles. Two of the smaller industries — wood and cork manufactures, and leather — have actually declined.

The agricultural sector has on the whole remained almost stationary compared with the pre-war position. The contrasting growth of industry indicates that Italy, in spite of the fact that the proportion of agricultural to industrial activity is still high (see p. 36, above) compared with the levels prevailing in the more highly industrialised countries, has gone a considerable way since the war towards increasing the degree of industrialisation and decreasing the degree of « ruralness » (8). The same development is reflected in the results of the Population Census taken in November 1951. These indicate that at that date 41 per cent of the active population was still engaged in agriculture compared with 48 per cent at the Census of 1936, while the proportion in industry, transport and communications was 36 per cent in 1951 as compared with 32 per cent in 1936. Figures for certain crops are given in Table IX. The area

(7) The index for petroleum and natural gas, taken alone, stood in 1952 at 2,165 (on the base 1938 = 100).

(8) Some brief comments on Italy's present position as compared with that of certain other countries are given elsewhere in this number of the « Quarterly Review ». Cf. pp. 70-71 below.

under wheat is shown to be considerably lower than before the war, though the yield per hectare has increased.

Two factors stand out from the Pella Report concerning the developments that took place in the Italian economy in 1952. The first is one on which we have already remarked, *i.e.* the slowing down in the rate of industrial expansion. The second is the marked change in the foreign trade and balance of dollars (*i.e.* by 25 per cent). The main group of products affected by the fall in total exports was textiles which fell from 484.7 million dollars in 1951 to 235.4 million in 1952 (*i.e.* by over 50 per cent). The increase in imports was due largely to imports of machinery and equipment which rose from 196.1 million dollars in 1951 to 294 million in 1952, although exports of machinery and equipment also increased from 297.4 to 317.5 million.

AGRICULTURAL PRODUCTION: AREA, PRODUCTION, AND YIELD FOR SELECTED ITEMS TABLE IX

	Area (Thousands of hectares)			Production (Thousands of quintals)			Yield per hectare (Quintals)		
	1936–39	1951	1952	1936–39	1951	1952	1936–39	1951	1952
Wheat	5,116	4,728	4,684	75,508	69,618	77,795	14.8	14.7	16.6
Rice	149	156	174	7,761	7,500	8,634	52.2	48.0	49.0
Maize	1,458	1,268	1,272	29,602	27,496	23,882	20.3	21.7	18.8
Tomatoes	57	84	81	9,523	12,428	10,894	167.3	147.7	133.9
Tobacco	33	58	60	425	795	820	12.9	13.8	13.7
Sugar-beet	135	198	221	32,716	59,579	58,700	242.8	300.8	265.9

Note: The 1952 figures are provisional

payments positions (9). As may be seen from Table X, total receipts from merchandise exports decreased by 14 per cent compared with the 1951 figure while total payments for merchandise imports increased by 3 per cent. Thus, the continuous upward trend of exports which had prevailed over the previous five years came to a halt.

The contraction in exports from 1951 to 1952 was concentrated principally in exports to the sterling area and to France (and the related currency area), and may in good part be attributed to the quantitative restrictions introduced in 1952 by the United Kingdom and other parts of the sterling area and by France (10). Receipts from exports to the sterling area fell from 619.9 million dollars to 371.5 million (*i.e.* by 40 per cent) and receipts from exports to France (and the related currency area) from 165.7 to 123.6 million

From the balance of payments on current account, together with part of the financing account, for the last two years, as shown in Table X, it appears that although the deficit with the dollar area was smaller in 1952 (and was slightly more than offset by American aid), the deficit with all areas combined was very much larger, the increase being due to the sharp reversal which took place in 1952 in Italy's position in the European Payments Union. Thus there also came to an end the period of several years during which Italy had maintained almost uninterruptedly a surplus position with the non-dollar area.

The detailed statement month by month of Italy's position in the European Payments Union over the last two years is reproduced in Table XI. From April 1951 to February 1952 inclusive, the monthly position of Italy in the EPU was continually a surplus one. By the end of 1951 Italy had a cumulative surplus position (for the whole period over which the Union had been operating, *i.e.* from July 1st, 1950) of 237.7 million dollars including 42.5 « existing resources » (sterling) trans-

(9) A much more detailed account of the development over recent years of Italy's foreign trade and balance of payments is given in a separate article. See pp. 44 below.

(10) Cf. pp. 51 below, for a more detailed comment on these restrictions, and on the effects of other factors influencing the recent movement in Italy's foreign trade position.

ferred to the accounts of the Union, and 7.5 « amortization of existing resources » (mostly of balances with France). Of this sum 98.3 million was settled through gold and dollar payments to Italy, and 139.3 million remained outstanding as credit extended by Italy to the EPU. In 1952 the position looked very different. In each of the months from March to December Italy had a deficit with the Union; and the cumulative deficit for the entire year amounted to 90.2 million dollars, after allowing for the « amortization of existing resources » (mostly of balances with France and the United Kingdom) to the extent of 14.5 million. Half of the deficit (*i.e.* 45.1 million) was settled in dollar and gold

BALANCE OF PAYMENTS, 1951 AND 1952, BY CURRENCY AREAS — TABLE X

(Millions of dollars)

	Convertible currencies		Inconvertible currencies: Subject to compensation through EPU		Inconvertible currencies: Not subject to compensation through EPU		Total	
	1951	1952	1951	1952	1951	1952	1951	1952
1. Merchandise imports	654.9	610.0	1,185.4	1.312,2	177.1	162.3	2,017.4	2,084.5
2. Merchandise exports	233.0	267.9	1,203.4	950.0	143.7	139.3	1,580.1	1,357.2
3. Balance on merchandise account (a)	− 421.9	− 342.1	18.0	− 362.2	− 33.4	− 23.0	− 437.3	− 727.3
4. Balance of invisibles	85.1	118.7	182.6	238.7	− 16.8	30.7	284.5	388.1
5. Items in course of settlement, arbitrage operations	24.6	13.4	− 8.5	10.9	12.6	3.8	28.7	28.1
6. Total balance on current account [(3)+ +(4)+(5)]	− 312.2	− 210.0	192.1	− 112.6	− 4.0	11.5	− 124.1	− 311.1
7. Compensating items:								
1) Receipts from ECA and MSA	279.6	217.9	—	—	—	—	279.6	217.9
2) Transfer to EPU of balances held with Central Banks and other institutions abroad	—	—	(b) 76.4	(b) 22.3	− 76.4	− 22.3	—	—
8. Balance [(6) — total of (7)]	− 32.6	7.9	268.5	− 90.3	− 80.4	− 10.8	155.5	− 93.2
9. Settlements in gold and dollars through EPU (c)	92.7	− 30.3	− 92.7	30.3	—	—	—	—

(a) It should be noted that the figures for merchandise imports and exports given here are those relating to payments and receipts as registered by the Italian Exchange Office (*Ufficio Cambi*). Considerable differences may exist between these and the customs figures (which are given in the publications of the Central Institute of Statistics) because of the lack of coincidence between the dates of payments (or receipts) and the dates of the passage of the relevant goods through the customs. In fact the customs figures show, in both years, a larger deficit than do the foreign exchange figures. The main difference, as the Pella Report indicates, is in the import figures which are considerably higher in both years according to the customs figures than according to the foreign exchange figures. The difference is attributed principally to imports of equipment which had been paid for in previous years.

The same difference in the manner in which the figures have been established is also responsible for discrepancies between the figures given here and some of those given in the article which follows (see p. 44).

(b) Other tables given in Signor Pella's Report for 1952 indicate that these items were made up as follows:

	1951 (Millions of dollars)	1952 (Millions of dollars)
Use of « existing resources » in EPU currencies	42.5	—
Amortization of « existing resources » in EPU currencies	7.5	14.5
Reduction of « working balance » in sterling	18.8	5.0
Increase in lira deposits held by foreign banks (of EPU countries)	7.5	2.8
Total	76.3	22.3

(c) These figures do not exactly correspond to the figures for the same item shown in Table XI below. The divergence is evidently due to a technical difference in accounting procedure affecting the dates at which the items were registered.

ITALY'S POSITION IN EUROPEAN PAYMENTS UNION, 1951 AND 1952

(Millions of dollars)

TABLE XI

	1951												Cumulative position	
	January	February	March	April	May	June	July	August	September	October	November	December	From Jan. 1st 1951 to Dec. 31st 1951	From July 1st 1950 to Dec. 31st 1951
1. Net monthly surplus (+) or deficit (—) (a)	− 20.0	− 27.2	− 5.4	+ 6.2	+ 18.6	+ 28.6	+ 54.1	+ 51.6	+ 24.2	+ 63.0	+ 21.5	+ 10.4	+ 225.5	+ *194.7*
2. Net use of « existing resources »	+ 16.8	+ 20.3	+ 5.4	—	—	—	—	—	—	—	—	—	+ 42.5	+ *42.5*
3. Interest	—	—	—	—	—	− 0.3	—	—	—	—	—	+ 0.8	+ 0.5	+ *0.4*
4. Cumulative net surplus (+) or deficit (—) due to (1)+(2)+(3)	− 3.2	− 10.1	− 10.1	− 4.0	+ 14.7	+ 42.9	+ 97.1	+ 148.7	+ 172.9	+ 235.8	+ 257.3	+ 268.5	+ 268.5	+ *237.7*
5. Settlements in gold and dollars (receipts by Italy, —), cumulative	—	—	—	—	—	—	− 12.6	− 38.4	− 50.5	− 82.0	− 92.7	− 98.3	− 98.3	− *98.3*
6. Debit (—) or credit (+) position [(4)+(5)]	− 3.2	− 10.1	− 10.1	− 4.0	+ 14.7	+ 42.9	+ 84.5	+ 110.3	+ 122.4	+ 153.8	+ 164.6	+ 170.0	+ 170.2	+ *139.3*

	1952												Cumulative position	
	January	February	March	April	May	June	July	August	September	October	November	December	From Jan. 1st 1952 to Dec. 31st 1952	From July 1st 950 to Dec. 31st 1952
1. Net monthly surplus (+) or deficit (—) (a)	+ 13.6	+ 0.3	− 0.1	− 1.0	− 22.5	− 20.5	+ 4.8	− 0.9	− 7.7	− 21.4	− 17.8	− 19.8	− 93.0	+ *144.2* (b)
2. Interest	—	—	—	—	—	+ 1.4	—	—	—	—	—	+ 1.3	+ 2.8	+ *3.2*
3. Cumulative net surplus (+) or deficit (—) due to (1)+(2)	+ 13.6	+ 13.9	+ 13.7	+ 12.7	− 9.8	− 28.9	− 24.0	− 24.9	− 32.6	− 54.0	− 71.8	− 90.2	− 90.2	+ *147.4*
4. Settlements in gold and dollars (receipts by Italy, —), cumulative	− 6.8	− 6.9	− 6.9	− 6.4	+ 4.9	+ 14.4	+ 12.0	+ 12.5	+ 16.3	+ 27.0	+ 35.9	+ 45.1	+ 45.1	− *53.2*
5. Debit (—) or credit (+) position [(3)+(4)]	+ 6.8	+ 6.9	+ 6.9	+ 6.4	− 4.9	− 14.4	− 12.0	− 12.5	− 16.3	− 27.0	− 35.9	− 45.1	− 45.1	+ *94.2*

(a) Includes amortization of « existing resources » in EPU currencies (held outside the accounts of the EPU) amounting to +7.5 (mostly balances with France) for the whole of 1951 and to +14.5 (mostly balances with France and the United Kingdom) for the whole of 1952.

(b) Including +42.5 representing use in 1951 of « existing resources » (sterling), *i.e.* of credit balances in EPU currencies outstanding prior to the establishment of the EPU.

Note: Discrepancies between totals and sums of constituent items are due to rounding.

payments by Italy to the Union, and the remainder led to a reduction of like amount in the credit outstanding extended by Italy to the EPU.

The manner in which the financing operations of the last two years affected Italy's balances in EPU currencies held outside the accounts of the Union, *i.e.* her « existing resources », her « working balance » in sterling, and the lira deposits of foreign banks is indicated in Table XII.

TABLE XII

ITALY'S « OUTSTANDING POSITION » IN EPU CURRENCIES HELD OUTSIDE THE ACCOUNTS OF THE EPU

	End of 1950	End of 1951	End of 1952
	(Equivalent in millions of dollars)		
1. « Existing resources » . . .	177.7	127.7	113.1
2. « Working balance » in sterling	24.5	5.7	0.7
3. Lira accounts (a)	8.6	16.1	18.9
Total [(1)+(2)—(3)] . . .	193.6	117.3	94.9

(a) This item is taken from the Bank of Italy's Annual Report for 1952 (p. 202).

Whereas some years ago it was feared that an insufficiency of supplies of fuel and power might be the bottleneck standing in the way of Italian industrial expansion, it now appeared that limitations on the possibility of expanding international trade were likely to be the most serious obstacle. It was the vivid manner in which this obstacle manifested itself in 1952, and in particular the heavy fall in Italian exports that occurred — partly in response to the reimposition of quantitative restrictions on imports by certain countries — simultaneously with an increase in Italian imports, which prompted Signor Pella to remark (11) that « the problem of the deficit in the balance of payments in the present situation constitutes the limiting factor to a policy of expanding domestic investment... The increase in Italian imports (from 1951 to 1952) derives exclusively from larger imports of raw materials... and of equipment. Both indicate the expansive tendency of domestic economic activity. It is evident that it would not be possible to continue in this direction unless the means of covering the deficit in the balance of payments were found ».

(11) Cf. p. 64 of the Report.

The Crisis in the Italian Balance of Trade

by

GIULIO PIETRANERA

1. — The gradual tendency towards a reduction of the deficit in Italy's balance of trade which was noticeable over the four year period 1947-50, was reversed in 1951. In 1951 the deficit rose to 305.7 milliard lire; and in 1952 it reached 581.6 milliard.

The data in Table I — expressed in 1938 lire as well as in current lire — illustrate this turn of events which has again drawn public attention to the problem of the disequilibrium in the Italian balance of trade. The gravity of the problem is enhanced by the fact that it coincides with a serious rise in the budget deficit (1).

Ever since 1946, except for an interruption in 1948-49, imports have been steadily growing; in 1952 they attained a level equal, in terms of 1938 lire, to two and a half times the figure for 1938 (27.7 as against 11.26 milliards). Exports were steadily expanding until 1951. In terms of 1938 lire they had regained the pre-war level of 10.5 milliards in 1948, and they surpassed that level by 73 per cent in 1951, when they stood at 18.2 milliard lire. In 1952, however, they shrank to 16.5 milliards, and the excess over 1938 exports was reduced to 56 per cent. The trade deficit fell from 1947 (when it reached a peak) until 1950, when the deficit was at a minimum. In terms of 1938 lire the deficit for 1951 (5.8 milliards) was 50 per cent above that of 1950 (3.5 milliards). The 1952 deficit (11 milliards) is nearly double that of 1951, and is only a little below the record figure of 1947 (11.4 milliards).

ITALY'S FOREIGN TRADE: 1938-1952 — TABLE I

Year	Imports			Exports			Percentage of exports to imports	Deficit		
	Current lire Milliards	1938 lire		Current lire Milliards	1938 lire			Current lire Milliards	1938 lire	
		Milliards	Index number (a)		Milliards	Index numbers (a)			Milliards	Index number (a)
1938	11.26	11.26	100	10.5	10.5	100	93.1	— 0.76	— 0.76	100
1946	91.5	3.2	27	64.6	2.2	21	70.6	— 26.9	— 1.–	129
1947	930.6	18.–	159	339.2	6.6	63	36.5	— 591.4	— 11.4	1,493
1948	822.8	15.4	135	570.6	10.5	100	69.3	— 252.2	— 4.9	636
1949	857.–	16.5	151	634.6	12.3	118	74.2	— 222.4	— 4.2	558
1950	900.3	18.8	166	746.9	15.3	146	83.0	— 153.4	— 3.5	454
1951	1,323.6	23.7	210	1,017.9	18.2	173	76.9	— 305.7	— 5.5	714
1952 (b)	1,445.8	27.5	244	864.2	16.4	156	59.7	— 581.6	— 11.1	1,460

(a) Current lire have been transformed into 1938 lire on the basis of the wholesale price index, as calculated by the Central Institute of Statistics.

(b) Provisional.

Source: *Statistica del Commercio con l'Estero.*

(1) On the deterioration in the budget situation see FRANCESCO COPPOLA D'ANNA, *The Italian Budget*: 1938-1952, in No. 22 of this Review (July-September, 1952).

Thus the proportion of imports covered by exports, which had risen from 36.5 per cent to 83 per cent in the period 1947-50, fell to 75.9 per cent and 59.7 per cent in 1951 and 1952 respectively (see Table I) (2).

2. — In 1951 the heavier deficit compared with that of 1950 was partly due to the expansion of imports by 423.3 milliard current lire (or by 47 per cent), which was not offset by the growth of exports of only 271 milliard lire (or 36.2 per cent). In 1952 on the other hand, the increased deficit compared with that of 1951 was due only in part to heavier imports (which rose by 122.2 milliard lire, or by 9.2 per cent); it was due in much larger measure to the marked decline in exports. The latter fell by 153.7 milliard lire, or by 15.1 per cent.

TABLE II

ITALY'S FOREIGN TRADE: INDICES, 1940=100

	1951	1952
1. *Quantities*:		
Imports	142.8	156.8
Exports	162.0	140.4
2. *Prices*:		
Imports	112.3	109.2
Exports	110.4	106.9
3. *Values* [=(1)×(2)]:		
Imports	160.4	171.2
Exports	178.8	150.1

Source: « *Statistica del Commercio con l'Estero* », December 1952.

Using the index numbers of prices and quantities published by the ISTAT (3) (Table II), it is possible to determine, subject to the usual reservations concerning such calculations, the extent to which these variations in values of imports and exports were due to movements in prices and the extent to which they were due to movements in quantities.

In 1951 the price indices showed an increase of 27 per cent for imports and 21 per cent for exports, compared with the levels of 1950. The quantity indices showed a 16 per cent increase for imports and a 10 per cent increase for exports. The figures indicate that *nearly two thirds of the total increase, of 423 billion for imports and of 271 milliard for exports, may be accounted for by the rise in prices and the remaining third by the increase in quantities* (4).

In 1952 the price indices showed a 3 per cent reduction below the 1951 level both for imports and for exports. The quantity indices showed a 10 per cent increase for imports and approximately a 12 per cent decrease for exports. The increase in the total value of imports (by 122.2 milliard lire), which occurred in spite of the fall in import prices, *is therefore accounted for exclusively by the increase in the volume of imports*. The decline in the total value of exports (by 153.7 milliard lire) appears to be *due to the extent of about one-fifth to the fall in export prices and of the remaining four-fifths to a shrinkage in volume*.

Causes of the Crisis.

3. — The chief factors that may be considered as having contributed in greater or less degree to the increase in the deficit in Italy's balance of trade in 1952 are the following:

(a) the Italian measures for the liberalisation of imports from EPU countries which — along with other measures tending to encourage purchases from other areas — have brought into being a policy of actively encouraging the expansion of imports, a policy

(2) In considering the estimates of the values of imports and exports it should be borne in mind that the former are CIF figures while the latter are FOB. Consequently the trade deficit is considerably reduced if imports as well as exports are taken net of freight and insurance. Indeed, it is estimated that freight accounts for 160 to 180 milliard lire of the total cost of imports, and that about 40 per cent of this amount is paid to ships sailing under the Italian flag.

(3) Central Institute of Statistics.

(4) The quantity indices published by the ISTAT for 1951 indicate increases for that year of 15 per cent for imports and of 4 per cent for exports. These index numbers were however compiled on the basis of partial data and have been corrected to the extent indicated in the *Annual Report of the Governor of the Bank of Italy for 1951* (May 31st, 1952) p. 138. The quantity indices published by the ISTAT in 1952 correspond to calculations made on the basis of the complete data, and have therefore been used in this paper (Table II).

which has been supported by the ample expansion of domestic credit;

(b) the world textile crisis;

(c) import restrictions adopted by other countries;

(d) facilities granted by other countries in favour of exports not matched by similar facilities in Italy;

(e) the deterioration of the « terms of trade ».

We shall comment on each of these in turn.

The Liberalisation Policy.

4. — Towards the end of October, 1951, the Italian Government adopted a series of measures which gave a more liberal tone to Italian commercial policy:

First, it abrogated the necessity of obtaining import licences for almost all goods coming from the EPU area (*i.e.* affecting more than 98 per cent of Italian imports from that area in the period January 1st-July 31, 1951) (5).

Secondly, it granted, through the Italian Exchange Control Office (UIC), loans at the reduced interest rate of 2.5 per cent, for a total of 60 million EPU units, for the financing of imports from EPU countries (6). These advances (made by the banks under the supervision of the UIC) had to be, and were in fact reimbursed by April 30th, 1952. But immediately afterwards a second *ceiling* of 40 million EPU units, repayable on or before October 31st was accorded. These special short-term credits, because of the low interest rates (about 4 per cent, inclusive of the commission charged by the banks) were taken up even for imports of goods for which the internal market showed signs of overstocking or even of depression (wool, cotton, hides and skins, etc.). They were additional to the medium-term credit facilities provided under certain special legislative measures of 1950 for financing imports of machines and equipment, both from the sterling area (up to an amount of £ 50 million) and from other areas (up to an amount of 30 milliard lire). These medium-term credit facilities — along with the ERP loans — exerted their effects on the volume of imports especially from 1951 onwards (7).

Thirdly, the Government widened the limits within which transfers of currency to EPU countries might be made for purposes of travel, medical treatment, etc. (8).

Fourthly, the Government introduced various measures in order to encourage purchases from countries with which Italy had increasing credit balances (9). For some goods the importers from such countries were automatically accorded the possibility of making pur-

(5) D.P. 1.XI.1951, Circular of the Ministry Foreign Trade, No. 22565, 31.XI.1951. Before October, 1951 « autonomous » provisions (*i.e.* provisions not carrying any binding international obligation and hence subject to revocation at any time) had already extended the liberalisation measures *vis-à-vis* the countries participating in the OEEC and their dependent overseas territories (excluding that is to say the independent countries of the sterling area and the assimilated territories for which other provisions were in force) to the following products: fats (Aug. 23rd, 1950); hides and skins, and paper (Jan. 31st and Feb. 8th, 1951); livestock, meat and fish (Sept. 6th, 1951).

(6) *Informazioni Commercio Estero*, ICE, 5.XI.1951.

(7) The imports of equipment, ships and aeroplanes financed by the special loans in sterling at 5 per cent (including the bank commission) increased from 5 to 36 milliard lire between 1951 and 1952 (and those financed by ERP loans from 29 to 41 milliards).

(8) UIC note, No. 127600, 31.X.1951.

(9) Thus, with respect to Argentina and Brazil, the so-called « coupling » system (*sistema degli abbinamenti*) was introduced, according to which exports from Italy had to be combined with concomitant imports for like amounts in the case of the Argentine, or for larger amounts (30 per cent larger) in the case of Brazil. This system had a certain effect. The credit balance in Italy's clearing account with Brazil fell from a peak of 21.9 million dollars (reached on October 20th, 1952) to 16.9 million (on March 31st, 1953). In the case of the Argentine, the « coupled » imports into Italy are supposed in principle to precede the exports; and since the Argentinian authorities do not easily grant import permits for « ordinary » Italian goods, the lag tends to be accentuated.

Italy's trade relations with Argentina are, however, dominated by the large credit granted by Italy under the agreement of June, 1952, an agreement which constitutes an exceptional element in Italian commercial policy.

Another measure worth mentioning, even if it was not of much practical importance, is the authorisation given in the summer of 1952 to Italian importers to take advantage of the arbitrage operations for which permission was given by the British authorities to the London market in the summer of 1952 for the acquisition against sterling payment of goods coming from the dollar area. The Italian facilities in this regard were of brief duration (August 3rd to September 7th, 1952) as were the British provisions on which they depended. The abrogation of these provisions was, as is well known, induced by the enormous demands for utilisation of sterling balances on the part of countries which held such balances. The suspension of the corresponding Italian facilities depended also on the substantial price increases due to the costs of the intermediaries.

chases in the dollar area for proportionate amounts (10).

At the beginning of 1952 the degree of liberalisation of imports by Italy from the EPU area had already reached 98 per cent of the total, as compared to an average of 69 per cent for all the other member countries; and at the end of that year the degree of liberalisation had risen to 99 per cent (11) as against an average of 77 per cent for the other countries (see Table III).

TABLE III

IMPORT LIBERALISATION BY O.E.E.C. COUNTRIES
(as percentage of total imports)

Countries	August 1951	January 1952	January 1953
Austria	nil	nil	nil
Belgium-Luxemburg	75	75	90
Denmark	63	65	75
France	76	suspended	suspended
Western Germany	suspended	75	81
Greece	nil	nil	nil
Ireland	75	75	75
Iceland	41	41	?
Italy	76	98	99
Norway	51	75 (1)	75
Netherlands	61 (2)	75	75
Portugal	83	84	85
United Kingdom	90	46	46
Sweden	75	75	91
Switzerland	75	75	92
Turkey	63	63	63

(1) As from May 1st 1952.
(2) As from September 1st 1951.

(10) Provisions of this kind were introduced for hides and skins, and for wool. The importers of raw hides and skins from EPU countries and from « clearing countries » (the provision being aimed especially, however, at the sterling area) were authorised to import hides and skins against payment in dollars to the extent of 10 per cent. From January 14th, 1953 the percentage was raised to 25, and the concession was extended to goods coming from Uruguay (which is not a « clearing country »). In order to stimulate imports of Argentinian wool (an important item among the quotas accorded by Italy) Italian importers were conceded (in December, 1952) the right to acquire wool against dollar payments either from Argentina herself of from other South American countries in the proportion of 2 actual dollars for every 3 dollars in the Argentine-Italian clearing account. In 1953 the ratio was raised to 1 free dollar for every 1 dollar in the clearing account.

(11) Automobiles, motor-cycles, printing machines, milk, wines, wheat, penicillina, and cork are excluded from the liberalisation measures.

In this policy, courageously adopted in spite of doubts and objections — Italy took a unique position, which responded to the needs of her own economic situation. Three factors were especially important.

The *first* was the *need for a high degree, on a permanent basis, of freedom of trade.* As is well known, the structure of Italy's foreign trade is such as to make it exceptionally vulnerable; this is due especially to the nature of her exports, which include non-essential goods and services, which are always the first to be hit by a trade depression and by restrictive or discriminatory measures. Among these items are fresh fruit and vegetables, certain textile products, the tourist trade, etc. Italy is therefore particularly interested in the establishment of an international « climate » which is liberal and allows for a steady expansion of trade.

The *second* factor was *the desire to correct the tendency towards a continued increase in her credit balances with the EPU.* Such a large credit position with EPU countries not only threatened to disturb the proper functioning of the Union, but als put Italy in the absurd position of financing the trade of countries economically stronger than herself and of exposing herself to heavy exchange risks.

During 1951 situation had become particularly difficult. Whereas on January 1st that year Italy had a debit position with the EPU amounting to 30.8 million dollars, on December 31st she had a credit position of 237.6 million. During 1952, on the othe hand, 63 million dollars of this credit were absorbed so that by the end of that year her credit position had fallen to 174.4 million. This reduction is due in large part to the development in her trading position with the United Kingdom and with Germany. Her trade with France, on the other hand, still shows a considerable surplus. During the first three mounths of 1953 Italy had a deficit in her account with the EPU amounting to 95.5 million dollars; her outstanding credit position had thus been reduced by the end of March to 79.1 million dollars.

The *third* factor was *the expansion of domestic investment* and consumption. Full liberalisation of her trade and the utilisation of the EPU credits were counted upon to

allow Italy to increase the supplies of goods on the domestic market during a period in which rearmament expenditures, the execution of a large scale investment and modernisation (12) programme, and increased consumers' expenditures might otherwise give rise to inflationary pressures.

We thus see that the liberalisation policy is not merely a series of disconnected measures; it is an integral part of Italian policy which looks towards European economic unity, the re-establishment of equilibrium in Italy's trading position with the EPU, and the plans for domestic economic expansion especially in the « depressed areas » of Southern Italy. As much the liberalisation policy corresponds to Italian needs, and a revision of that policy would become necessary only if the other countries were to persist in restrictive policies. At the moment the relaxing of import restrictions by certain countries gives hope that it will be possible for Italy to persevere along the path on which she has started.

What have been the consequences of the measures taken for the « liberalisation » of inter-European trade?

We cannot give an evaluation which pretends to « quantitative» accuracy: owing to the multiplicity of other causes which are operating simultaneously, either in the same or in the opposite direction, any such evaluation can be no more than a very rough indication. Indeed, along with the abrogation of the necessity of obtaining import licences for goods coming from EPU countries, two other factors have helped to encourage imports:

The *first* is a credit policy which, quite apart from the special loans mentioned above, was particularly liberal in 1952 (13).

The *second* is the moderation shown by Italy in her tariff policy. Indeed, the abolition of quantitative restrictions would have had less influence on imports from the EPU countries if the high *ad valorem* duties of the general tariff of 1950 had been applied. Those duties have, however, come into force only for about 200 items among the approximately 5,500 covered by the general tariff; on all the others either the « bound duties » as agreed on by GATT (and also by the special agreement with Switzerland) are applied, or still lower duties are charged, the latter being fixed by the Government under the special powers with which it was vested up to the end of 1954, and which were aimed at allowing readjustments and counteracting rises in prices. Moreover, the duties in force were lowered by a further 10 per cent by a Decree of November 1st, 1951 (No. 1125) for almost all products. For certain food products the duties were even temporarily suspended. As a result of these alleviations the present Italian customs duties are — taken as a whole — among the most moderate in Europe.

A recent study made by the Ministry of Foreign Trade shows, in fact, that imports from the EPU area of goods liberalised by *independent action* under the provision of November 1st, 1951, *i.e.* between 76 and 98 per cent of the total, increased by 43 milliard lire (or by 45 per cent), in the first ten months of 1952 as compared with the corresponding period in 1951, and that if the goods liberalised prior to November, 1951 are included the increase is 50 milliards. This increase accounts for more than 50 pe rcent of the total increase of imports during the relevant period. The increase affected mainly raw materials and capital goods, and in both sectors it led to reactions on the home market, in some instances creating difficulties for local producers. This has been the case more especially for meat, and for certain branches of the mechan-

(12) Particular reference should be made to the two basic laws relating to investments, the Act of 10.VIII.1950, No. 644 appropriating 1,000 milliard lire for the *Cassa per il Mezzogiorno* to be allocated over a period of 10 years, and the Act on Civil Investments of 27.VII.1952, No. 949, appropriating another 557.5 milliard, also to be spent over a period of 10 years, to which are to be added the appropriations for workmen's dwellings, for mountain lands, for enlarging and modernising the plants of government and private undertakings, etc.

(13) The official directives calling for restraint, issued after the outbreak of the war in Korea, have been tacitly dropped; and the banks, under the stimulus of keen competition, have shown much more willingness to lend; between December 31st, 1951 and December 31st, 1952 they increased the volume of their loans and credits by 21-25 per cent (depending on whether we use the statistics referring to the type of activity financed, or those referring to the type of credit extended). This credit expansion is one of the striking features of the Italian economic situation in 1952, and causes some surprise when it is compared with the only moderate expansion of production.

ITALY'S IMPORTS AND EXPORTS BY MONETARY AND GEOGRAPHICAL AREAS: 1950 - 1951 - 1952 (*) TABLE IV

	Imports						Exports						Surplus (+) or Deficit (—)		
	1950		1951		1952		1950		1951		1952				
	Milliards of lire	Per cent	Milliards of lire	Per cent	Milliards of lire	Per cent	Milliards of lire	Per cent	Milliards of lire	Per cent	Milliards of lire	Per cent	1950	1951	1952
E.P.U. Countries (a)	477.1	53.–	733.5	55.4	850.6	58.8	526.6	70.7	753.6	74.1	595.2	68.8	+ 49.5	+ 20.1	— 255.4
of which:															
Sterling Area (b)	(194.2)	(21.6)	(343.7	(25.9)	369.6)	(25.5)	(217.3)	(29.–)	(348.3)	(34.2)	(233.5)	(27.–)	+ 23.1)	(+ 9.1)	(— 121.1)
America Countries with which Italy has:															
— Bilateral agreements (c) .	68.4	7.6	83.–	6.3	40.2	2.7	51.5	6.9	53.6	5.2	31.8	3.6	— 16.9	— 29.4	— 8.4
— Dollar area (d)	245.3	27.3	347.6	26.3	378.9	26.2	83.3	11.1	111.–	10.9	124.8	14.4	— 162.–	— 236.6	— 254.1
Eastern Europe (e)	48.4	5.4	62.5	4.7	79.0	5.4	55.–	7.3	66.6	6.6	58.–	6.7	+ 6.6	+ 4.1	— 21.–
Other Countries (f)	58.2	6.5	96.8	7.3	97.1	6.9	29.8	4.–	32.9	3.2	54.4	6.5	— 28.4	— 63.9	— 42.7
Total	897.4	100.–	1,323.4	100.–	1,445.8	100.–	746.2	100.–	1,017.7	100.–	864.2	100.–	— 151.2	— 305.7	— 581.6

(*) The countries are according to the classification adopetd by the O.E.E.C.

(a) Austria; Belgium-Luxemburg and Belgian Congo; Denmark; France and Saar; French West Africa; French South Africa; Algeria; French Morocco; French Somaliland; Tunisia; French Guaiana; French Dependencies in North and Central America; Indo-China; other French Dependencies in Asia; French Dependencies in Oceania; Germany (Federal Republic); United Kingdom (Ireland; Malta; Gibraltar; Aden; Burma; British Borneo; Ceylon; Cyprus; Jordan; Hong-Kong; Iraq; British Malaya; Pakistan; India; other Arabian countries; British West Africa; British East Africa; British South Africa; Libya; South Africa; Zanzibar; British Dependencies in North and Central America; British Dependencies in South America; Australia; New Zealand; British Dependencies in Oceania; Australian Dependencies in Oceania; Egypt; Ethiopia; Anglo-Egyptian Sudan; Thailand; Eritrea; Afghanistan); Greece; Iceland; Norway; Netherlands and Surinam; Dutch Dependencies in Central America; Indonesia; Portugal and Portuguese West Africa; Portuguese South Africa; Portuguese Dependencies in Asia; Sweden; Switzerland; Turkey.

(b) For list of countries in the sterling area, see bracket following the United Kingdom in footnote (a).

(c) Argentina; Brazil; Ecuador.

(d) United States; Porto Rico; U.S. Dependencies in North and Central America; Canada; Costa Rica; Cuba; Guatemala; Haiti; Honduras (Republic); Mexico, Nicaragua; Salvador; Panama; San Domingo; Bolivia; Chile; Colombia; Perù; Uruguay; Paraguay; Venezuela.

(e) Bulgaria; Hungary; Poland; Rumania; Czechoslovakia; U.S.S.R.; Germany (Federal Republic); Albania; Finland; Yugoslavia.

(f) Spain and Spanish West Africa; Spanish Morocco; Somaliland; Liberia; Saudi Arabia; Bhutan and Nepal; China; Korea; Philippines; Japan; Iran; Israel; Lebanon; Mongolia; Syria; Yemen; U.S.A. Dependencies in Oceania.

ical engineering trades which are already engaged in a laborious process of readjustment.

The results of the liberalisation policy are also reflected in the movement of imports classified by monetary areas and countries of origin (see Table IV).

The growth of imports from the EPU area is much more marked than the growth of imports from other monetary areas. In other words, the distribution of Italian purchases abroad was further modified in 1952 in favour of the EPU countries, and more especially of their metropolitan areas. Thus, of total Italian imports in 1952, 35.8 per cent (as against 31.2 per cent in 1951) came from the metropolitan areas of the EPU countries, 8.4 per cent (as against 7.8 per cent in 1951) from the dependent territories of the EPU countries, and 56.8 per cent (as against 61 per cent in 1951) from countries not members of the EPU (see Table IV).

The Textile Crisis.

5. — *The shrinkage of Italian exports seems to depend almost exclusively on the reduced sales abroad of the products of the textile industries, which declined in 1952 by no less than 178 milliard lire, thus exceeding the fall that occurred in exports as whole (153.7 milliard lire)* (14).

The ratio of textile exports to total exports from Italy has therefore fallen. In 1951 they amounded to 385 milliard lire and were equivalent to 37 per cent of total Italian exports; in 1952 they fell to 207 milliards, accounting for only 24 per cent of the total value of exports (see Table V). Cotton and synthetic fibre products accounted for 56 per cent of the total reduction, and woollen products for 48 per cent.

Since, in recent years, Italian exports of textiles went chiefly to European countries, and more especially to France and the United Kingdom, the decline must be ascribed in large measure to the restrictions which the Western European countries placed on imports, partly in response to the fall which took place in their own exports to overseas markets. In fact, *Italy's textile export to France and the United Kingdom fell from 1951 to 1952, by 36 and 33 milliard lire respectively.*

Imports of textiles amounted in 1951 to 313 milliard lire, and in 1952 to 299 milliard. Thus, whereas in 1951 exports exceeded imports by 72 milliard lire, in 1952 imports exceeded exports by 92 milliard (see Table V).

ITALY'S FOREIGN TRADE BY MAIN COMMODITY GROUPS — TABLE V

	Exports						Imports					
	Milliards of lire			Per cent			Milliards of lire			Per cent		
	1950	1951	1952	1950	1951	1952	1950	1951	1952	1950	1951	1952
Foodstuffs	194	205	197	26	20	23	199	280	268	21	21	19
Textiles	262	385	207	35	37	24	205	313	299	22	23	21
Metallurgical and mechanical engineering products	170	227	245	23	22	28	195	242	343	21	18	24
Fuel	18	29	60	2	3	7	169	271	281	19	20	19
Chemicals	23	53	51	3	5	6	44	54	57	5	4	4
Others	86	130	104	11	13	12	114	194	198	10	14	13
Total	753	1.029	864	100	100	100	926	1.354	1.446	100	100	100

Source: Central Institute of Statistics.

Italy was consequently in a very difficult position in 1952. She could not pass on to her imports — by reducing them correspondingly — the decline in demand for her exports, as the United Kingdom succeeded in doing.

Although the textile industry, which in the early stage of industrial development in

(14) This difference was offset by the heavier exports of other goods especially chemical products and petroleum derivates (see section 9 and Table XV).

Italy, was the basic one, has ceded first place in the last thirty years to the mechanical engineering industry, it still employs (1950-1951) about 15 per cent of industrial workers. As a net exporter of textile products, Italy was ahead of the other most important textile exporting countries of Europe both in 1938, when she contributed 25 per cent of the total exports, and in 1951 when she contributed 37 per cent (see Table VI).

TABLE VI

NET TEXTILE EXPORTS AS PERCENTAGE OF TOTAL EXPORTS (1)

	1938	1951
Belgium	7	11
France	13	13
Western Germany	4	1
Italy	25	37
United Kingdom	17	15

(1) Exports *less* imports of manufactured articles.

The present textile crisis is therefore especially serious for Italy, and points to the need for a more varied and more intense industrial development which would render her economy less vulnerable to fluctuations in the textile sector.

Quantitative Restrictions on Imports.

6. — In 1951 and 1952 the shrinkage of the foreign exchange reserves of the countries belonging to the sterling area (the United Kingdom, Australia, etc.) and of France induced those countries to impose quantitative restrictions on imports, which seriously hit Italy's export possibilities.

The reduction of Italian textile exports to the United Kingdom and France (see section 5) offers a clear example of the way in which the restrictions — by aggravating the world textile crisis — have affected the volume of Italian sales.

On the other hand, restrictions introduced by Western Germany, which were serious in 1950-51, were considerably mitigated in 1952, and in that year the West German market was the most important for Italian goods. The amount taken by Western Germany rose from 80.2 milliard lire in 1951 to 87.6 milliard lire in 1952, and Western Germany's share in the

ITALY'S IMPORTS AND EXPORTS BY PRINCIPAL COUNTRIES TABLE VII

Imports						Exports					
	1952		1951		Increase (+) or decrease (—) 1951 to 1952 Percent		1952		1951		Increase (+) or decrease (—) 1951 to 1952 Percent
Countries (a)	Milliards of lire	Percent of total imports	Milliards of lire	Percent of total imports		Countries	Milliards of lire	Percent of total exports	Milliards of lire	Percent of total exports	
United States	303.4	20.9	284.5	21.0	+ 6.6	Germany	87.6	10.1	80.2	7.7	+ 9.2
Germany	133.4	9.2	99.9	7.3	+ 33.5	United States	87.0	10.0	70.5	6.8	+ 23.4
United Kingdom	79.6	5.5	50.0	3.6	+ 59.2	United Kingdom	71.3	8.2	138.5	13.4	— 48.6
Saudi-Arabia	59.3	4.1	53.3	3.9	+ 11.2	France	56.6	6.5	92.6	8.9	— 38.9
Australia	59.1	4.0	76.9	5.6	— 23.2	Switzerland	56.2	6.4	57.7	5.6	— 2.6
France	57.5	3.9	58.5	4.3	— 1.8	Turkey	27.9	3.2	20.7	2.0	+ 34.7
Switzerland	54.2	3.7	42.0	3.1	+ 29.0	Greece	26.3	3.0	20.2	1.9	+ 30.1
Austria	41.9	2.8	32.1	2.3	+ 30.5	Austria	24.0	2.7	21.1	2.0	+ 13.7
Belgium-Luxemb.	41.8	2.8	34.0	2.5	+ 22.9	Belgium-Luxemb.	21.5	2.4	24.2	2.3	— 11.2
Iraq	34.5	2.3	12.9	0.9	+ 167.4	Sweden	20.4	2.4	26.8	2.6	— 23.9
Other Arabian Countries	31.9	2.2	18.1	1.3	+ 76.2	Brazil	19.9	2.3	25.3	2.4	— 21.4
Canada	30.3	2.0	30.4	2.2	— 0.4	Yugoslavia	18.3	2.1	18.8	1.8	— 2.7
British Malaya	28.8	1.9	44.0	3.2	— 34.6	Egypt	18.1	2.0	25.4	2.4	— 28.8
Egypt	28.4	1.9	31.9	2.3	— 11.0	Netherlands	15.1	1.7	20.5	1.9	— 26.4
Sweden	25.8	1.7	31.1	2.2	— 17.1	Pakistan	14.3	1.6	18.7	1.8	— 23.6

total rose from 7.7 to 10 per cent (see Table VII) (15).

The figures given in Table IV show that the most marked reductions in Italian exports — from 1951 to 1952 — concern chiefly those going to Western European markets and to the sterling area. While Italian imports from the sterling area increased (from 343.7 milliard lire in 1951 to 369.6 milliard in 1952) our exports towards those markets fell from 348.3 to 233.5 milliards. Thus, the surplus (of 4.6 milliard lire) was turned into a deficit (of 136.1 milliard). The decline (by 114.8 milliard lire) accounts for about 74.7 per cent of the total decline (of 153.7 milliard lire) in Italian exports over that period.

Looking at the figures for Italian exports to individual countries in the sterling area, we may note the shrinkage that occurred from 1951 to 1952 in exports to the United Kingdom (from 138.5 to 71.3 milliard lire, a reduction of 48.6 per cent, see Table VII), to Australia (from 35.4 to 10.1 milliard lire), and to New Zealand (from 1.5 to 0.78 milliard lire).

Exports to the other EPU countries outside the sterling area fell from 404.3 to 361.7 milliard lire (see Table IV). The most serious reduction, largely due to the quantitative restrictions on imports, occurred in exports to France (which fell from 92.6 to 56.6 milliard lire). The proportion of total Italian exports taken by France thus declined from 8.9 per cent in 1951 to 6.5 per cent in 1952.

Measures for Encouraging Exports.

7. — The measures taken by various countries to increase their own exports are capable of adversely affecting the Italian balance of trade in two ways, and should therefore be mentioned among the factors that have aggravated the Italian deficit. On the one hand, they help to intensify foreign competition on the Italian market; on the other, they tend to make more difficult the position of Italian exporters in foreign markets.

In considering the position of Italian exporters it should once again be emphasized that in recent years they found themselves at a clear disadvantage on the international market. During this period the Italian Government has taken almost no part in the race to encourage exports through tax alleviation, medium-term credits, loans at low rates of interest, export credit guarantees, hard currency bonuses, and the manipulation of exchange rates. Therefore the competitive power of our exporters has been weak compared with that of exporters in other countries (16).

A few summary remarks will be sufficient to illustrate Italy's positions in this regard.

1) The right of Italian exporters to retain 50 per cent of their receipts in hard currency and to sell it, within certain limits and under certain conditions, on the free market (retention quota) has lost all importance as is evidenced by the smallness of the disparity which now remains between the free and official exchange rates (17). Factors contributing to this result are the liberalisation of imports from European countries, which has had the effect of diminishing the importance of dollar accounts, accompanied by the maintenance of import licensing for goods which are obtainable at lower prices on dollar markets.

(15) The United Kingdom restrictions were originally introduced in November, 1951, and they were intensified in January, 1952, after the Conference of the Commonwealth Finance Ministers. As a result the « degree of liberalisation » applied by the United Kingdom, which had risen to 90 per cent in the previous period, fell to 61 per cent in November and to 46 per cent in the following February, and remained at that level throughout 1952 (see Table III).

The French restrictions date from February, 1952, when all the liberalisation measures taken previously were abrogated and import licences and quotas on all goods coming from OEEC countries were reintroduced.

(16) Not only the Government's hesitancy with regard to the problems of export credits and export credit insurance, but also the inadequacy of its commercial services abroad has been a factor of some importance. In addition the producers — even aside from the complex problem of production costs — are generally still far ahead of their foreign competitors in the field of commercial efficiency, market research, responsiveness to buyers' demands and tastes, standardisation, and so on. Moreover, the coordination of public and private action, which in other countries contributes to the success of export activities, is lacking in Italy.

(17) The divergence between the official and the black market rates for the dollar has declined continually since 1951. The rates have moved as follows:

	Official rate	Black market rate
1951 (annual average)	624.9	679
1952 (annual average)	624.92	654
1953 (average for 1st quarter) . . .	624.91	635

2) At the same time the advantages enjoyed by Italian exporters as a result of the undervaluation of the lira with respect to certain currencies — sterling and the French franc — have been greatly reduced or have even disappeared (18). At the same time the effectiveness of the premium has been more or less neutralised as the result not only of price movements but also of quantitative restrictions, especially in the case of France (19).

3) In Italy there are very few measures in favour of exports and those that exist have been introduced only recently; that scope is in no way comparable to the systems in force in other European countries, especially in France and Germany.

Two types of measure are at present in force:

(a) A rebate of excise duties is granted on the following goods in so far as they are exported: yarns, natural textile fibres, mineral oils, sugar, alcohol, salt and beer. Given the special nature of the excise duty, the rebate is an equalising measure vis-à-vis other countries (20).

(b) A rebate of the general sales tax (IGE) (21) has been granted since October 1952 in respect of certain goods. Originally it applied only to a few goods mostly connected with MSA purchases, and was limited exclusively to sales against convertible currencies (U.S. and Canadian dollars, Swiss francs). In the spring of 1953 the rebate will be extended to about fifty important mechanical engineering products with respect to all the monetary areas (22).

The consequences of the present Italian sales tax are, moreover, complicated by its cumulative character. The fact that it is levied every time a product changes hands on its way from the raw material stage to that of consumption, means that it ends by constituting a form of protection in reverse, *i.e.* a kind of tax on exports, a tax formed by the compounding of the successive levies. Thus, for example, studies made in the mechanical engineeringing industries indicate that « the percentage added to total manufacturing cost by the IGE varies from about two per cent to as high as eight or nine per cent » and that « in the establishments using sub-contracting extensively, the IGE sometimes compounds to 13 or 14 per cent of the costs of materials purchased » (23).

(18) In January, 1952, the divergence between the « official » rates (178.5 for the French franc and 1,749.72 for the pound sterling) and the « black market » rates (159 and 1,604) amounted to 12 per cent and 9 per cent respectively, or that is levels such as to stimulate exports to the sterling and French franc areas and to discourage imports from those areas. Even exports to the dollar area were affected by this factor; they tended to take place through « triangular » deals via France and Great Britain, thus increasing Italy's surplus with the EPU, and increasing her dollar gap. But as early as June, 1952, with the narrowing of the difference between the « official » and « black market » rates, the premium was reduced to 8 per cent for the pound sterling (free exchange rate 1,635).

(19) In March, 1953, the divergence between the rates for the pound sterling had fallen to 5 per cent (free rate 1,673) while the divergence between the rates for the French franc had risen to 13 per cent (free rate 158).

(20) Under the tax systems of foreign countries also either the excise duty is not levied on that of the output of a good that is intended for export, or it is refunded.

(21) The general sales tax is levied on every transaction that gives rise to a taxable receipt; hence it is levied each time a good is transferred or a service is rendered. The normal rate (which has remained unchanged since January 1st, 1947) is 3 per cent; but there are also special rates for many groups of products.

(22) Under a Ministerial Decree of December 26th, 1952 (No. 8387), with retroactive effect to March 1st, 1952, the sales tax is refunded on exports to dollar territories of the following articles:

articles	*rebates*
hats and straw products	3½% of the sales price
asbestos-cement products	90 lire per 100 kgs.
radar-equipment	4% of sales price
tractors and motor vehicles	5% of sales price
warships	4% of sales price
accordions	400 lire
munitions	1½%-2% of sales price

A further Ministerial decree (31.III.1953) provides for rebates on certain other articles concerning the MSA only. For those customs list items that are produced by the mchanical engineering industries and which shortly be eligible for the rebate (machine tools, sewing machines, locomotives and railway rolling stock, turbines and generators, tow trucks, etc.) the rebates will run from a minimum of 2.5 per cent to a maximum of 5.8 per cent.

(23) See « Economic and Industrial Problems of the Italian Mechanical Industries », CISIM (*Commissione Indagini e Studi sull'Industria Meccanica*), Rome, 1952, pp. 161-2.

The American experts who took part in the enquiry on which the above study is based proposed that the levy of the sales tax on each successive transaction should be dropped, and the general tax on sales to the ultimate consumer or on retail sales of goods should be raised to 6 per cent. In their opinion such a rate should not cause alarm as France has a similar tax at the rate of nearly 17 per cent, and in Great Britain some articles are taxed at rates exceeding 50 per cent (in both countries exports are, of course, exempt).

Nor is this all: the system of cumulating the sales taxes over all the different stages increases the difficulty of entering markets in countries where, as in the United States, duties are levied *ad valorem* on the price at which the goods are offered for sale on the home market of the exporting country. From this point of view, exporters from countries, such as the United Kingdom, Sweden, which levy a sales tax only once at the time when the goods pass from the wholesaler to the retailer are in a more advantageous position.

4) Italy has no « equalisation taxes » such as have been introduced elsewhere with the object of restoring competitive conditions with those countries which refund indirect taxes at the time when the goods are exported. And nothing has been done to facilitate, through the granting of subsidies, the purchase of key raw materials under special emergency conditions (as was done, for instance, in France and in the United Kingdom after the outbreack of the Korean war for certain goods, in order to save the processing industries from having to bear the full burden of the price increases in the international market).

5) As regards *special* bank credits for financing exports, nothing of a systematic nature has been done in Italy along the lines of the measures adopted in France and Germany especially for medium and long term credits (24). The problem that arises here is one which affects more especially exports of machinery built to order, and of plant and equipment in general, and is of special importance for the revival and redirection of exports to meet the new demands of world markets and of the under-developed countries. But more than one obstacle stands in the way of a positive solution to this problem:

(a) The strict rediscount policy applied by the Italian monetary authorities with the object of avoiding inflation. Unless the Italian banks have the possibility of automatic rediscount they will obviously be unwilling to expand their longer-term loans.

(b) The absence, on which we shall comment below, of modern systems for the insurance of export credits. This makes the risk of immobilisation and of loss correspondingly greater and more difficult for the banks to assume.

(c) The scarcity of capital on the home market. The available supply is already insufficient to meet the needs of the expansion and modernisation of the domestic productive equipment.

Indeed, the only medium-term credits at present granted are those concerning exports to the Argentine which are the result of a direct agreement between the Argentine Government and the Italian Government, which, under the Convention of June, 1952, has given substantial and, in view of the risks entailed, generous aid (25).

The other credits opened through of the clearing accounts are contained within the usual « functional » limits except for the exceptionally heavy balance accumulated in the clearing account with Brazil (26).

6) Italy has none of those systems for insurance of export credits against special risks that are so common abroad. A measure in course of preparation (27) is still pending. Moreover, in view of its very limited scope

(24) The only facility that may be mentioned in this connection is the concession to the banks (acting as agents) of the possibility of obtaining dollar loans at a low rate of interest for financing Italian exporters who wish to constitute and replenish stocks of goods in the U.S. with the object of stimulating sales in that market. The amount that may be obtained in this way is limited to 50 per cent of the loan granted by the bank and to a sum not exceeding 50 per cent of the value of the goods deposited in the U.S. The remaining 50 per cent has to be covered by the bank out of its own foreign exchange balances. In practice this could not and does not take place.

(25) The Italo-Argentinian agreement of June 25th, 1952, provides facilities of two kinds: (a) a higher margin of credit than under the previous agreement (100 instead of 80 million dollars) for the « ordinary » account; (b) a unilateral credit of 75 million dollars granted by Italy to Argentina for capital goods, especially mechanical engineering products.

(26) In 1952 the clearing account between Italy and Brazil showed a steady surplus in favour of Italy and led to the total utilisation of the credit ceiling (5 million Italo-Brazilian account dollars) granted to Brazil. In October, 1952, however, the « crisis » in the clearing account obliged the Italian Government — which had previously expanded the margin of credit — to adopt control measures such as the reintroduction of the licence system for exports to Brazil and the introduction of a special system of « coupling » (see footnote 9 on p. 3 above).

(27) *Disegni di Legge e Relazioni* presented to the Senate (No. 2967, 25.III.1953).

(the Government would give guarentees against exceptional risks, in return for a premium of 1-3 per cent of the amount guaranteed, for a total volume of credits not exceeding 10 miliard lire, or, that is, not much more than 16 million dollars, per annum) in comparison with the measures taken in other countries (*e.g.* with £ 900 millions of the Export Credit Guarantees Department in Great Britain and the DM 2,400 millions of the state insurance system in Germany).

7) Neither the « drawback » nor the « temporary import » procedure can be considered « privileges ». They are, merely measures aimed at equalising the conditions of production for certain domestic manufacturing industries vis-à-vis foreign competitors. In any case, the « drawback » operates at present only for cotton goods. The « temporary import » procedure, under which imports of raw materials and semi-finished products which are intended for re-export after processing are exempt from the beginning from the payment of customs duties, is limited to certain processing activities carried out for account of others (particularly in textiles), and is organised with bureaucratic controls that diminish its effectiveness.

While there is no doubt that the measures adopted in foreign countries to facilitate exports reacted unfavourably on the Italian balance of trade, it is impossible to ascertain the measure in which they contributed to the increase in the deficit. It is not only prices that have to be considered. The volume of trade depends also on other factors such as the quality of the products and the size and elasticity of demand and of supply, etc., and as a result of the operation of these factors, the various measures adopted may not — in particular instances — have succeeded in forcing a higher level of exports.

Even in those cases where price differences are the determining factor, it is hard to separate the impact on competitive prices of special facilities (taxes, credits, or insurance) from that of other cost factors. It is clear, however, that in numerous markets, the facilities to which we have referred have proven decisive in ousting a number of Italian products; and in any case they aggravate the already existing inferiority of our competitive position, which is due to higher production costs, a lower degree of adaptation to the requirements of local buyers, and a weaker commercial organisation.

In considering whether, and to what extent, Italy should herself develop a programme of special facilities for exports, account needs to be taken of certain limitations, in addition to those already mentioned with respect to the granting of export credits.

First, it will be useful to ascertain to what extent tax rebates, or premiums, or guarantees, or credit facilities can really help the recovery of our exports, and to what extent they may merely lead to an increase in the quantities exported (the receipts from abroad remaining the same) or to a redistribution of the national income in favour of Italian exporters. It is necessary for this purpose to make a study of markets and economic sectors, both domestic and foreign, and to choose certain selective criteria.

Secondly, for some products, even equalising measures may be insufficient to re-establish competitive opportunities, because of the higher internal production costs; or they may be irrelevant because of the inelasticity of foreign demand. Further complications are introduced by problems of productivity and of the adaptation of the production structure to the changing requirements of foreign markets — problems which involve responsibilities not only of private firms, but also of fiscal and financial authorities.

Thirdly, as a general rule, Italy, an economically weak country with budget difficulties and with high costs of production, is bound to be opposed to a relentless war of fiscal rebates, special credits, insurance facilities, and so on, which entail delicate financial and redistribution problems, and, moreover, risk cancelling each other out to the benefit of certain groups of importing countries. It is for this reason that Italy has been up to now

rather slow — in fact almost inactive — in responding to the demands of exporters, and has not considered the possibility of participating in the « export-drive » except as a defence measure against the practices of other countries.

The Terms of Trade.

8. — The extent to which the deterioration of the terms of trade (by about 40 per cent from 1951 to 1952; see Table VIII) helped to aggravate the deficit in Italy's balance of trade was almost negligible.

TABLE VIII

TERMS OF TRADE

(Monthly average 1948 = 100)

Years	General Index	Agriculture	Industry
1951	98.3	95 2	100.5
1952	97.9	107.9	96.3

Source: « *Statistica del Commercio con l'Estero* », December 1952.

According to the figures reproduced in Table VIII, the general index of the terms of trade deteriorated slightly in 1952 (to 97.9 as against 98.3 in 1951), because of a small decline in import prices relative to export prices. This movement was the result of a noticeable improvement in the agricultural index (from 95.2 to 107.9), which was more than neutralised by the deterioration in the industrial index.

In order to obtain a rough measure of the effects of this deterioration, we have made a calculation of what the values of Italy's foreign trade would have been in 1952 had she been able to operate in the world market on the basis of 1951 prices. At 1951 prices, 1952 imports would have cost Italy 30 milliard lire less, whereas export proceeds would have been reduced by 33.3 milliards. The deterioration of the terms of trade from 1951 to 1952 thus increased the Italian commercial deficit by only 5.7 milliard lire.

Components of the Trade Deficit by Monetary Areas.

9. — To complete the analysis, Table IX presents some statistics concerning the extent to which trade with the various monetary areas and the most important countries affected the increase in the deficit. The following points emerge from the table:

TABLE IX

ITALY'S FOREIGN TRADE: SURPLUS (+) OR DEFICIT (—) BY MONETARY AREAS AND MAIN COUNTRIES

(Milliards of lire)

	Surplus (+) or deficit (—) in 1925	Surplus (+) or deficit (—) in 1951	Increase (+) or decrease (—) 1951-1952
E.P.U. Countries	+ 20,1	—255.4	—275.5
of which:			
Sterling Area	(+ 9.1)	(—121.1)	(—130.2)
United Kingdom	(+ 88.5)	(— 8.3)	(— 96.8)
France	(+ 34.1)	(— 0.9)	(— 35.1)
Germany	(— 19.7)	(— 45.8)	(— 26.1)
Austria	(— 11.1)	(— 17.9)	(— 6.8)
America Countries with which Italy has bilateral agreements	— 29.4	— 8.4	+ 21.-
of which:			
Argentina	(— 35.4)	(— 2.2)	(+ 33.2)
Dollar Area	—236.6	—254.1	— 17.5
of which:			
United States	(—214.-)	(—216.4)	(— 2.4)
Canada	(— 24.4)	(— 24.6)	(— 0.2)
Eastern Europe	+ 4.1	— 21.-	— 25.1
of which:			
U.S.S.R.	(+ 1.0)	(— 8.5)	(— 9.5)
Other Countries	— 63.9	— 42.7	+ 21.2
of which:			
Spain	(— 1.1)	(+ 3.-)	(+ 4.1)
Japan	(+ 0.7)	(+ 6.3)	(— 5.6)
Saudi Arabia	(— 51.1)	(— 56.-)	(+ 4.9)
Total	—305.7	—581.6	—275.9

(a) The increment in the total deficit from 1951 to 1952 (275.9 milliard lire) was almost equal to the increment in the deficit towards the EPU countries (275.5). These movements clearly reflect the effects of Italy's liberalisation policy, of the imports of capital goods with special financing provisions, of the import restrictions adopted by the United Kingdom and France, and of the measures

adopted by various countries for encouraging their own exports.

(b) The deficit with South American countries with bilateral agreements (Argentine, Brazil, Ecuador) showed a shrinkage of 21 milliard lire.

(c) Trade with Eastern Europe resulted in a rise in the deficit of 25.1 milliard lire.

(d) Only in trade with the « other countries », was there a reduction in the deficit (a reduction which amounted to 21.2 milliard lire). Japan and Saudi Arabia (with which accounts are settled in dollars) contributed, the former to diminish the deficit by 5.6 milliard lire, the latter to augment it by 4.9 milliard lire.

(e) The increase in the deficit with countries in the dollar area which was relatively moderate — 17.5 milliard lire — caused the total deficit with this area to rise to 254.1 milliard lire.

Both imports from and exports to the dollar area rose. The increase in imports (from 347.6 to 378.9 milliard lire) was greater than the rise in exports (from 111 to 124.8 milliard lire), but the latter merits special emphasis not only in view of the sharp decline in the total of our exports, but also because Italy suceeded in considerably augmenting her sales to the U.S.A. (from 70.5 to 87 milliard lire). The U.S.A. thus became in 1952 our second most important international market after Germany. The proportion of total Italian exports for which she accounted reached 10 per cent (compared with 6.8 per cent in 1951). The proportion of total Italian imports represented by imports from the dollar area remained on the other hand almost unchanged, at about 26 per cent (see Table VII).

In 1952 the rise in Italian exports to the dollar to the dollar area was accompanied by an increase in exports against dollars to countries not included in the area itself (from 19.5 to 31.9 milliard lire). Italian imports against dollars from such countries increased from 70.9 milliard lire in 1951 to 75 milliard lire in 1952. On the whole, then, Italy's trade in dollars with countries outside the dollar area reduced the dollar trade deficit by 8.3 milliard lire.

Distribution of Imports and Exports by Groups of Commodities.

10. — As is evident from Table V, the five major groups of commodities (food products, textiles, metal and mechanical engineering products, fuels, chemicals) still represent in value terms more than 80 per cent both of imports (1951: 87 per cent; 1952: 88 per cent) and of exports (1951: 86 per cent; 1952: 83 per cent). But the turn of events in 1952 led to a marked change in their relative proportions. The change affected especially the two major groups: it affected *textiles in the export field and mechanical engineering products in the import field.*

The value of textile imports decreased only slightly (by 14 milliard lire), as compared with the level of 1951, in spite of the fall of prices, whereas textile exports fell abruptly (by 178 milliard lire) with the result that the proportion of the value of total exports represented by them fell from 37 per cent (1951) to 24 per cent (1952).

Metal and mechanical engineering products, unlike textiles, showed a slight expansion (by 18 milliards), in respect of exports, partly because of rising prices. Far greater, however, was the growth in the value of imports (by 101 milliards), under the stimulus of the domestic investment programme (which affected imports of metal ores, machinery and equipment, etc.).

Metal and mechanical engineering products thus reached first place among the various groups of commodities, both as regards imports (24 per cent) and as regards exports (28 per cent). On the whole, the deficit in the balance of trade in the metal and mechanical engineering sector taken alone considerably deteriorated in 1952; it reached 98 milliards (as compared with 15 milliards in 1951).

The proportion of imports of food products to total imports diminished from 21 per cent (1951) to 19 per cent (1952). The proportion of exports of such products to total exports rose from 20 per cent to 23 per cent. The deficit in the balance of trade in food products remained approximately unchanged at a little above 70 milliards.

As regards fuels larger imports of crude oil (which rose from 103 to 139 milliards) greatly exceeded the reduction in coal imports (from 140 to 118 milliards); and they gave rise to considerable re-exports of the refined product.

Balance of Trade and Balance of Payments.

11. — The « General Report » published by the Ministry of the Treasury on March 31st, 1953 presents the trade deficit under a more favourable light. It shows the cash deficit, *i.e.* the difference between payments and receipts of foreign exchange registered by the UIC (Italian Foreign Exchange Office) on account of commercial transactions with foreign countries, as amounting in 1952 to 727 million dollars (475 milliard lire). This figure is considerably lower than the deficit calculated by the ISTAT (Central Institute of Statistics) on the basis of the statistics collected by the customs offices concerning the movement of goods. This marked difference reflects lags, involving considerable sums, between the shipping of Italian goods and the receipt of the relevant proceeds, or else between advance payments and the arrival of goods ordered abroad. As has already been observed, advance payments played a role especially for imports of capital goods, financed by ERP funds and by the special fund of 50 million pounds sterling.

The deficit in the balance of payments is

ITALY'S BALANCE OF PAYMENTS: 1951-52 — TABLE X

(Millions of U.S. dollars)

	1952		1951		Percent change 1952 to 1951
	Millions of dollars	Per cent	Millions of dollars	Per cent	
Receipts					
Exports	1,357.2	70.1	1,580.1	77.7	— 14.2
Freight	165.5	8.6	132.2	6.6	+ 25.1
Tourism	90.9	4.6	89.2	6.3	+ 1.9
Emigrant remittances	102.1	5.2	69.4	3.5	+ 47.1
Income from investments	17.1	0.9	17.2	0.8	— 0.01
Other services	202.3	10.5	144.3	7.1	+ 40.1
Total	1,935.1	100.0	2,032.4	100.0	+ 4.7 %
Payments					
Imports (C. I. F.)	2,084.5	91.6	2,017.4	92.3	+ 3.3
Tourism	14.1	0.6	13.8	0.6	+ 2.1
Income from investments	15.8	0.7	15.9	0.7	— 0.01
Other services	159.9	7.1	138.1	6.4	+ 15.7
Total	2,274.3	100.0	2,185.2	100.0	+ 4 %
Balance					
Goods	— 727.3		— 437.3		
Services	388.1		284.5		
Total	— 339.2		— 152.8		
Unsettled items, arbitrage, operations, etc	28.1		28.7		
Adjusted balance	— 311.1		— 124.1		
Compensating items					
E. C. A. disbursements	217.9		279.6		
Changes in foreign exchange reserves	— 93.2		155.5		

Source: *Relazione Generale sulla Situazione Economica del Paese*, submitted by the Minister of the Treasury to the Chamber of Deputies, 31st March 1953.

ERRATA CORRIGE

Pag. 59, col. 2, line 12: Instead of « or more especially the domestic investment programme », read « or more especially *of aiding* the domestic investment programme ».

still lower. According to the UIC figures (*i.e.* the so-called « foreign exchange » balance of payments), the deficit amounts to 311 million dollars. This figure, which is considered to be a close approximation to the true situation, constitutes the difference between the merchandise deficit (727.3 million dollars) on the one hand the surplus from the invisible items (388.1 million dollars) and items in course of settlement, arbitrage operations, etc. on the other (see Table X). The surplus from the invisible items came mostly from emigrants' remittances (1952: 102,1; 1951: 69,4 million dollars) and freight (1952: 165,5; 1951: 132,2 million dollars). The receipts from the tourist trade remained stationary (1952: 90,9; 1951: 89,2 million dollars).

On the other hand, a considerable reduction took place in foreign aid. In 1951 it reached 279.6 million dollars, as against a deficit of 124.1 million dollars in the balance of payments. In 1952 it fell to 217.9 million dollars, as against a deficit of 311.1 million dollars. As a consequence of these changes the foreign exchange reserves, which increased in 1951 by 155.5 million dollars, decreased in 1952 by 93.2 million dollars.

At the end of March, 1953 the Italian foreign exchange reserves, according to reliable estimates, amounted to a total of 841.2 million dollars, and consisted of 496.7 millions in gold, dollars, and hard currencies, 52 million EPU units, 84.6 million in pounds sterling and other currencies of EPU countries, and 177.1 millions of net credits in clearing accounts and other non-transferable currencies (Argentine pesos, cruzeiros, etc.).

Conclusions.

1) The deficit in Italy's merchandise balance reached such proportions in 1952 that it could no longer be covered by the surplus from the invisible items, and by American aid. There thus began a drain on the foreign exchange reserves which Italy had accumulated both through the cautious use of her ERP dollar resources, and through the increase in trade brought about by the Korean war.

2) The principal causes of the crisis in the Italian balance of trade in 1952 are:

(a) The world textile crisis which hit the sector of Italian industry which had long been the largest contributor to exports.

(b) The foreign exchange crises that came to a head at the end of 1951, and the restrictions that were consequently reimposed by other countries on imports of our products.

(c) The « import policy » pursued by the Italian authorities with the purpose either of reducing our credits abroad, in conformity with the operating requirements of the EPU, or more especially the domestic investment programme.

(d) The absence of an Italian « export policy ». Italy has lacked so far the consistent, methodical, and efficient action which the principal industrial countries have taken during the post-war period in the name of the « export-drive ». Both public agencies, and private firms and commercial organisations have been deficient in this respect.

3) So far as Government action is concerned, it seems that, given the character of our administrative and economic structure, this should follow orthodox lines: that is, the liberalisation policy and the development of an export policy. A return to quantitative restrictions on imports cannot be considered except as an extreme measure.

4) Italy's attitude towards the liberalisation policy is conditioned by the structural weakness of economy. As a country which imports raw materials and semi-manufactured goods, and exports, to a large extent, non-essential products, Italy is interested in stability of international trade, and in all measures aimed at the expansion of markets. It is thus of vital importance for her to resist the restrictive tendencies prevailing in other countries, and her policy in the OEEC is motivated by this necessity. The maintenance by Italy of liberalisation at the exceptionally high level reached in November, 1951 obviously requires, however, that the other principal EPU countries should follow the same line. Moreover, the persistence of a serious commercial deficit might induce the adoption of some discriminatory revision especially as regards non-essential goods.

5) An « export policy » becomes more and more necessary as markets become « buyers' market » and as competition increases with the return of important exporting countries (Germany and Japan) that were temporarily eliminated by the events of the early post-war period. A serious approach to this problem must lay stress on the fiscal, insurance, and credit aspects. The introduction of special facilities for exports raises, however, certain difficulties (due especially to the scarcity of capital), and their effectiveness may be limited by the conditions of foreign demand, by costs and other factors affecting the responsiveness of Italian production, and by the continual accentuation of the « export drives » of other countries. Excessive facilities in favour of exports, which in the pre-war period were largely based on competitive currency depreciation, are being repeated in these post-war years in a much greater variety of forms and in continually growing measure, in consequence they are even more likely to be self-defeating in the long run and are perhaps more dangerous in their effects on the terms of trade of the exporting countries.

For all these reasons Italy has hesitated to engage in such practices herself and is insisting in the OEEC on the advisability of obtaining an agreement for the mitigation of some of the practices followed by other countries.

6) Thus the problem of the crisis in Italy's foreign trade position links up with that of international cooperation; such cooperation is essential to the solution of the basic problems of the Italian economy, burdened as it is with a structural disequilibrium between natural resources and population. Up to now international cooperation — however broad in the field of economic aid — has fallen short in that of emigration; all the more serious therefore would be a failure in the field of international trade. The difficulties come not only from the side of the EPU countries, but also from the accentuation of protectionist tendencies in America.

7) The Italian investment policy — and the associated expansion of consumption — can count on a certain volume of foreign exchange reserves. But, in the long run, only a rise in exports can provide the means for continuing such a policy. The persistence of a trade deficit of dimension which cannot be covered by the proceeds of the invisible items and foreign aid (28) would necessitate restrictive measures and, as a consequence, a slowing up of the programmes aimed at raising employment and national income above the present low levels.

Post-scriptum.

No discussion of the possible future development of the Italian trade crisis with EPU countries and with the dollar area can be more than a matter of conjecture. The manner in which recent and authoritative forecasts have been disproved by the actual course of events (29) counsels extreme caution in this regard.

Nevertheless, it may be useful to review the points that have been raised in support of the view that the worst is over and that the tendency is now more towards an improvement than towards a deterioration.

(a) As regards the *EPU countries*, the decline in Italy's credit position towards the EPU puts exceptional measures for stimulating imports such as operated in 1952 out of the question. The imports of capital goods financed by special loans are also coming to an end. The pressures of Italy's investment policy, which might bring Italy into a debtor position in the EPU, remains an imponderable element. On the other hand, exports to EPU countries should benefit from the relaxing of quantitative restrictions (30).

(28) A slight increase in receipts from the tourist trade and from emigrants' remittances is expected for 1953; on the other hand it is not unlikely that receipts from freight (given the world-wide decline in rates) will fall. In any case there will not be any substantial increase in net receipts from « invisibles ». A much more significant contribution will be made by American « off-shore » purchases. Even so, only a recovery in commodity exports can play a decisive role in reducing the trade deficit.

(29) Thus official sources foresaw that Italy would remain in a creditor position towards the EPU in 1952-1953 and in 1953-1954; in fact, in March, 1953, her credit position was already disappearing, and in May-June, she will undoubtedly have a debit position. See « *Europe - The Way Ahead; Towards Economic expansion and Dollar Balance* », OEEC, Paris, December 1952, pp. 290-291.

(30) In the first quarter of 1953 Italian imports from EPU countries increased by 19.6 per cent as compared to the corresponding period of 1952 (from 214 to 256 milliard lire), while in 1952, as compared to 1951, they had increased by 15.9 per cent (see Table IV). Imports from the sterling area increased by 20.4 per cent (from 79.3 to 95.5 milliard lire); while in 1952, as compared to 1951, they had increased by 7.5 per cent (see Table IV). In the export side the decline of Italian sales

towards EPU countries continued, though at a slower rate in 1952 than in 1951; they fell from 163 to 145 milliard lire (see Table VII). Exports to the sterling area fell by 31 per cent (from 55 to 38 milliard lire) as compared to a reduction of 33.1 per cent in the first quarter of 1952.

(b) The *dollar gap* might be aggravated by several factors: the reduction of certain dollar exports of an exceptional character (sales of rice to Japan to the amount of about 8 billion lire, and of fertilizers to Korea to the amount of about 4 billion lire); the decline in exceptional sales to the United States of goods required for the rearmament programme and for stock piling of strategic materials (machine tools, steel products, mercury, cast iron and iron alloys, aluminium); and the possible raising of tariffs. A factor working in the opposite direction might be the reduction of Italian purchases of cereals, cotton, and coal, which were exceptionally high in 1952. Indeed, in the case of wheat, a resumption of buying in Argentina is probable; in the case of cotton, imports from the United States will shrink with the exhaustion, in 1953, of the Eximbank-ERP funds utilized for that purpose; as regards coal, there should be a rise in British exports (31).

(c) In the first quarter of 1953 the index of average import prices declined (by 13.7 per cent), with respect to the corresponding period of 1951; their fall was much more marked than the fall (of 5.5 per cent) in the index of export prices. The *terms of trade* consequently improved (from 100.5 in the first quarter of 1952 to 105.1 in the first quarter of 1953). Should this movement be sustained, it would contribute to the lessening of the trade deficit.

(31) In the first quarter of 1952, as compared to the corresponding period of 1951, imports from the dollar area diminished by 21.3 per cent (from 99 to 78 milliard lire) as against an increase of 8.9 per cent in 1952, with respect to 1951 (see Table IV). Exports to the dollar area continued to grow at a rate almost equal to that of 1952: they increased by 11.3 per cent (from 27.2 to 30.3 milliard lire) as against an increase of 11.7 per cent in the corresponding period of 1952.

The Parliamentary Enquiry into Unemployment in Italy

by

GIORGIO RUFFOLO

The Enquiry into Unemployment, which arose out of a motion introduced in the Chamber by four Deputies (1) on 28th November, 1950, and adopted by the Chamber on 4th December, 1951, was set going on 30th May, 1952, when the Commission of Enquiry was appointed. The first stage of the Enquiry was completed at the end of March 1953.

The main purpose of the Enquiry was stated as follows by the Chamber: « to make a thorough and exhaustive enquiry into the present situation regarding unemployment and under-employment in Italy and into the condition and vocational status of the unemployed » (2).

In the few months during which it has been at work, and in spite of difficulties and obstacles, the Commission has collected a large and comprehensive mass of material which it has arranged to meet the purposes of four series of investigations: (a) a general survey aimed at « measuring » the quantity and appraising the quality of unemployment; (b) direct questioning of unemployed persons, experts, trade union leaders, administrative authorities; (c) special enquiries into certain selected aspects of the problem; (d) regional monographs. The material, brought together in 15 volumes of which 4 have already been published (3) will serve as a basis for the final Report which will sum up, in a first descriptive part, the results of the Enquiry and will present, in the second part, a diagnosis of the phenomenon, and a plan of action (4).

A summary statement of the results of the principal enquiries arranged by the Commission allows of some useful observations, even though they are still incomplete and approximate, on the magnitude, the limits, and the main characteristics of unemployment in Italy.

1. — Until now, as is known, the only means available for « measuring » unemployment in Italy was provided by the registrations at the Labour Exchanges. Attention has frequently been drawn to the reasons why these statistics are of doubtful validity (5). They are vitiated by their one-sided character, in that they are limited to the most superficial aspect of the phenomenon, *i.e.* to the *number* of persons seeking work through the *official* channels of the Labour Exchanges. The ten enquiries which the Commission arranged and which have been carried out by public and private organisations (6) were aimed at pro-

(1) The Hon. Tremelloni, Saragat, Bennani and Vigorelli (Doc. 1682 of the Chamber of Deputies).

(2) Parliamentary Commission of Enquiry into Unemployment: *L'inchiesta parlamentare sulla disoccupazione dalla « proposta » al programma di lavoro in corso*, Descriptive Monograph No. 1, Rome, 10th September, 1952.

(3) Part I of Vol. 1; Parts I and II of Vol. 2; Part I of Vol. 4.

(4) The Report will consist of two parts: « The facts » and « The proposals ».

(5) References to statistical data on unemployment and explanations thereof can be found in several articles that have been published in this Review. See in particular *Unemployment statistics in Italy, with special reference to Southern Italy*, by A. Molinari, No. 21, 1952; *Statistical Appendix, Explanatory Notes: Unemployment*, p. 71, No. 8, 1949; *Compulsory Unemployment Insurance in Italy*, by G. Papa, No. 23, 1952.

(6) The following is the list of the enquiries: (a) a national statistical survey of the labour force, conducted by the Central Institute of Statistics; (b) a revision of the registration lists at the Labour Exchanges, conducted by the Ministry of Labor; (c) an enquiry into labor turnover, made by the Institute for Economic Studies; (d) an enquiry into the physical and psychological conditions of unemployed workers, made by the *Ente Nazionale Protezione Infortuni*; (e) a survey of pensioners of the National Institute of Social Insurance who are also gainfully employed by others; (f) an enquiry into the degree of employment of rural groups, conducted by the National Institute of Agrarian Economy; (g) an enquiry into the family budgets of

viding the basis for a less incomplete quantitative and qualitative evaluation of the *effective* amount of « idleness » (7) among the Italian population. The core of the study is constituted by two enquiries: (a) the enquiry regarding the *labour force*, made by the Central Institute of Statistics; and (b) the special revision of *the registration lists at the Labour Exchanges*, conducted by the Ministry of Labour. Two other enquiries throw light on some fundamental aspects: (c) the *degree of employment of rural groups* (made by the National Institute of Agrarian Economy) and (d) the *labour turnover in firms* (by the Institute for Economic Studies) (8).

The Criteria Used in Collecting Data and the Purposes of the Four Enquiries.

2. — (a) The first enquiry, that of the ISTAT on the labour force *provides a general picture of the « active » population* (employed and unemployed labour) and of the « inactive » (*i.e.* those with no trade or profession) obtained by the use of « sample » investigations.

The « sample » used consists of 58,397 families, distributed over the several parts of the country in proportion to the population. The families were selected from 627 Communes, grouped: (a) according to population; (b) according to the degree of « ruralness » (ratio of the agricultural to the total active population); and (c) according to the type of agricultural area (mountain, hill or plain). The families in each Commune were selected from the population registers, by drawing lots. The total number of persons included in the « sample » numbers 233,131, representing 5 per mil of the total population. The process of collecting information took the form of direct interviews with the families, made by a thousand investigators, and it lasted one week, from 14th to 20th September, 1952. The results, worked up by the ISTAT, refer to the previous week, from 7th to 13th September, 1952.

(b) The purpose of the second enquiry, made by the Ministry of Labour, was to improve the methods of registration at the Labour Exchanges, with a view to defining more accurately the size and composition of the « official » labour market.

Unlike the ISTAT enquiry, the revision of the registers made by the Ministry of Labour has taken the form of a real *census* of the persons registered, so planned as (a) to exclude any possible « infiltration » of employed persons into the lists, and (b) to obtain an adequate knowledge of the « qualitative » composition of the lists (with divisions by geographical area, economic sector, trade or profession, sex, age, civil condition, grade of education, etc.). The data refer to 30th September, 1952.

(c) The third enquiry (that of the INEA) was made with a special view to ascertaining the importance of latent under-employment in agriculture. It provides a general survey of the degree to which rural groups are employed, and two surveys of a special character. The first of these deals with the degree of agricultural employment in areas under extensive cultivation in Central and Southern Italy. Returns were obtained for 110,000 families, numbering some 600,000 persons. The second of the two surveys deals with the seasonal character of employment, and was carried out by examining the work calenders of « representative » peasant families taken from all parts of the country. Another enquiry into the degree of agricultural employment in the lower Valley of the Po had already been made by the INEA (9).

(d) The fourth report on the rigidity of the demand for labour in industry, has been made by the ISE which examined the labour turnover (hirings and dismissals) for a representative group of firms.

the unemployed, conducted by the Central Institute of Statistics; (h) an enquiry into the demand for and available supply of labour, on *métayer* farms in Tuscany, made by a Working Group of the Commission; (i) an enquiry into the competitive examinations announced by Public Bodies; (j) an investigation of the registration lists of agricultural labourers drawn up for insurance purposes.

(7) The expression « idleness » (*disimpiego*) has been adopted by the Commission to define the total magnitude of the idle labour force. It covers both unemployment in the strict sense and the several forms of under-employment.

(8) For the sake of brevity we shall refer to these four enquiries in this paper respectively as: (a) ISTAT, (b) Ministry of Labour, (c) INEA, and (d) ISE.

(9) See G. Medici and G. Orlando, *Agricoltura e Disoccupazione*, Bologna, 1951.

The enquiry covers 188 concerns, selected to represent all the leading branches of industry, employing 254,000 persons, equivalent to 8.6 per cent of the total number employed in the branches considered. The concerns investigated were located in four areas centering on Milan, Turin, Genoa and Rome respectively.

TABLE I - COMPOSITION OF THE LABOUR FORCE

Population, classified according to employment status	Below 14		14 and above		Total	
	Thousands	%	Thousands	%	Thousands	%
1. *Labour force*	202.7	1.8	19,155.5	53.5	19,358.2	41.1
Employed	202.7	1.8	17,869.3	49.9	18,072.0	38.4
– workers self-employed or employed by others	51.6	0.5	14,405.6	40.2	14,457.2	30.7
– assistants	151.1	1.3	3,463.7	9.7	3,614.8	7.7
Unemployed	—	—	1,286.2	3.6	1,286.2	1.3
– formerly employed	—	—	608.5	1.7	608.5	1.3
– in search of first job	—	—	677.7	1.9	677.7	1.4
2. « *Inactive* »	11,100.7	98.2	16,679.3	46.5	27,780.0	58.9
– working in the home	340.2	3.0	11,992.0	33.4	12,332.2	26.2
– students	4,965.4	43.9	1,182.6	3.3	6,148.0	13.0
– others	5,795.1	51.3	3,504.7	9.8	9,299.8	19.7
Total (1 + 2)	11,303.4	100.0	35,834.8	100.0	47,138.2	100.0

The ISTAT Enquiry into the Labour Force on 8 September, 1952.

3. — *The composition of the labour force in Italy.*

Table I summarises the general results of the enquiry made by the Central Institute of Statistics.

Even if taken at their face value and without the qualifications which will be given further on, the ISTAT figures enable us to infer some significant facts and problems:

(a) First of all Table I show *the high ratio of « inactive » to total populations*: 58.9 per cent (some 28 millions people) are not employed or actively seeking employment. If we exclude from the calculation those who are under 14, and consider only those who are of working age, the proportion « inactives » falls to 46.5 per cent. Using the figures excluding the under-fourteens, we may make a summary comparison with similar enquiries made in France and the United States (10).

Table II points to the low ratio of the labour force (inclusive of the unemployed) in Italy (53.5 per cent) as compared with the American figure (57.3 per cent) and the French (63.8 per cent).

TABLE II - EMPLOYMENT STATUS OF CIVILIAN POPULATION OVER 14
(Percentages)

	Italy	France	U. S. A.
1 – *Labour Force*	53.5	63.8	57.3
Employed	49.4	62.9	56.2
Unemployed	3.6	0.9	1.1
2 – *Inactive*	46.5	36.2	42.7
Total (1 + 2)	100.0	100.0	100.0

If we take the labour force exclusive of the unemployed, and consider only the employed, the comparison is still more unfavourable: 49.9 per cent in Italy as against 56.2 per cent in the U.S.A. and 62.9 per cent in France. But this is not all. Apart from considerations con-

(10) The French enquiry refers to December, 1951, and the American to October, 1952.

cerning differences of date and the different criteria used in making the returns, the figure for the employed as given by the ISTAT enquiry is an overestimate, for reasons that will be given in section 4.

(b) *The occupational structure* as depicted by the results of the enquiry classified by economic sectors, shows the « mixed » (agricultural-industrial) character of the Italian economy (see Table III).

TABLE III - OCCUPATIONAL STRUCTURE

	Employed	
	Thousands	%
Agriculture	7,494.3	42.4
Industry	5,609.8	31.7
Transport	659.1	3.7
Commerce, banking, insurance	1,882.1	10.6
Public administration	1,044.0	5.9
Other activities	998.7	5.7
Total employed population (1)	17,660.0	100.0

(1) Excluding the Armed Forces.

In spite of the marked industrial expansion of the last fifty years, agriculture is still the main activity in Italy, accounting for 42.4 per cent of all employed persons. The Italian economy may therefore still be described as « a mixed economy of a predominantly agricultural character ». As is shown by a summary comparison with the data for the distribution of the employed labour force in France and the U.S.A. (see Table IV), the number enganged in agricultural activities is definitely higher than in France (a mixed economy predominantly industrial in character), and is the reverse of the situation existing in the U.S. where 88 per cent of the employed population is engaged in non-agricultural activities.

TABLE IV - COMPARATIVE FIGURES FOR RATIO OF AGRICULTURAL TO NON-AGRICULTURAL ACTIVITY

	Percentages		
	Italy	France	U.S.A.
Engaged in agricultural activities	42.4	31.8	11.7
Engaged in non-agricultural activities	57.6	68.2	88.3
Total employed	100.0	100.0	100.0

The prevalence of agriculture in Italy is a powerful factor making for rigidity in the labour market. In particular, *unemployment for the most part takes the forms which are typical of an agricultural economy*: the forms, that is to say, of chronic and seasonal unemployment and of under-employment, as contrasted with the cyclical form which is characteristic of industrially advacend economies.

(c) The following table sums up the geographical distribution of Italian employment:

TABLE V - GEOGRAPHICAL DISTRIBUTION OF EMPLOYMENT

	Persons employed	
	Thousands	% of population
Northern Italy	8,697.5	42.5
Central Italy	3,313.8	39.1
Southern Italy	4,014.0	34.6
Islands	1,662.7	30.0
	17,688.0 (a)	38.3

(a) Excluding the Armed Forces.

The degree of employment in Italy falls gradually as we proceed from North to South: it falls from 42.5 per cent of the total population in Northern Italy, to 30 per cent in the Islands. Some two-thirds of the population in Southern Italy and the Islands are inactive, and are dependent on the other third. *This is one of the most symptomatic indices of the « depression » in Southern Italy.*

(d) The ISTAT enquiry assesses the number of *unemployed* at 1,286,000, *i.e.* at 7 per cent of the total population and at 6.6 per cent of the labour force. (If the groups under 14 are excluded, the ratio of unemployed to the population stands at 3.6 per cent in Italy, as against 1.1 per cent in the U.S. and 0.9 per cent in France). The analytical data published by the Institute od Statistics point to some interesting aspects of the structure and composition of this mass.

The unemployed fall into two distinct groups, of almost like size, but of diverse origin: that of workers formerly employed (608,000) and that of persons in search of their first job (678,000).

The first group consists mainly of adult males, and especially of industrial workers. More precisely, men account for 75 per cent, adults (from 20 to 40 years of age) for 70 per cent, and industrial workers for 60 per cent of the total number. They are, for the most part, workers who have been discharged (46.4 per cent) or who have lost their jobs because the firm has closed down (14.8 per cent). In this group, 16.9 per cent of the unemployed had been out of work at the date of the enquiry for less than a month; 27.25 per cent for from 1 to 3 months, 15.6 per cent for from 3 to 6 months, and 39.7 per cent for more than 6 months. The average duration of unemployment seems therefore to be high; and the fact that over one third of the unemployed had been out of work for more than 6 months is a confirmation of the *chronic character of a large part of the unemployment in Italy*.

The data relating to the second group point to the importance of unemployment among juveniles and among females: indeed 64 per cent of the unemployed in this group belong to the age groups between 14 and 20, and the percentage of women amounts to 39 per cent of the total. The group also includes a large number of *students* who form the kernel of *Italian white-collar unemployment*.

A notable fact also is the difference in the educational status of the two groups considered. In the first only 16 per cent have frequented schools above the elementary level; in the second, on the other hand, the proportion reaches 37 per cent. The low level of education in the first group calls attention to one of the most notable features of Italian unemployment: *the lack of training* which creates a barrier between the supply of and demand for labour that is difficult to overcome. The problem is, moreover, aggravated by the discrepancies between the skills required and those offered: the presence of a great number of university students and graduates (more than 2 per cent of the labour force), who weigh on the market, is typical of the situation.

(e) Another serious problem is that of *bureaucratic inflation*, shown by the very large number of persons employed in the offices of the Public Administration (5.9 per cent of the total number of employed). The 1,000,000 civil servants represent in large parte a body of workers of low efficiency and earning low wages, forming a large depressed sector of the employed population.

(f) As regards the *inactive population*, it consists for the most part of women working in the home (12.3 million) and of students (6.1 million). The other 9.3 million consist of the lowest age groups, the aged, invalids and persons incapable of working, etc. The composition of the inactive population thus calls attention to the grave problem of the lack of productive employment for a *large part of the female and juvenile population*.

4. — As we have already remarked, the above considerations based on the ISTAT enquiry take the figures and statistical groupings at their face value. Taken in isolation, however, they are apt to be misleading, and they should be supplemented by certain qualifications which make the final picture a much more serious one than that so far presented.

(a) The distinction between unemployed and employed persons adopted by the enquiry, tends to restrict the phenomenon of unemployment. Thus the ISTAT enquiry considers as unemployed *only those who at the date of the survey (September 1952) had no employment (even casual or temporary) and who were actively seeking work*. As the report of the Institute of Statistics itself states (11), this is a purely conventional distinction and has been adopted mainly in order to reduce to a minimum the amount of discretionary judgement left to the investigators. A large number of persons classified in the enquiry as being among the employed should really be included among the unemployed either (a) because their work is casual and temporary, or (b) because the number of hours they work per

(11) *Alcune osservazioni sui risultati della rilevazione*, Chap. VII, p. 27 of Vol. 1, Part I.

week is very low. Another large class of workers rightly belongs to the category of the under-employed. Fortunately, the enquiry, by drawing a distinction between the several groups according to the number of hours worked, supplies the data for illustrating this point.

TABLE VI - EMPLOYED PERSONS CLASSIFIED BY THE NUMBER OF HOURS WORKED IN THE WEEK THE ENQUIRY WAS MADE

Employed Persons	Thousands	%
1 – Who did not work in the week the return was made	1,151.4	6.5
2 – Who worked	16,536.6	93.5
of which :		
less than 15 hours . . .	258.6	1.5
from 15 to 39 hours . .	2,878.1	16.3
more than 40 hours . . .	13.399.9	75.7
Total number employed (1 + 2) .	17,688.0	100.0

The 258,600 persons employed for less than 15 hours a week can, roughly speaking, be included in the class of the unemployed, and the 2,878,000 who worked less than the normal 40 hours a week may be considered as under-employed. We thus arrive at a new classification of the labour force which brings us a step nearer to the truth. We have:

Unemployed	1,544,800
Under-employed	2,878,000
Employed	13,400,000
Total labour force	17,822,800 (12)

The criterion of the number of hours of work is of course only a rough one, and the results obtained lend themselves to much sound criticism but, until further facts are ascertained, it is the only one which enables us to distinguish the several degrees of unemployment among the labour force.

(b) We should also take into account the *date* of the enquiry (7-13.9.52).

For agriculture and the building trade September is a month of high employment. Therefore the returns include among the employed — including those working full time — a large number of agricultural workers, and of labourers who are idle during a large part of the year.

(c) Finally it should be observed that the enquiry, by the very fact that it was devised to give a « photograph » of the situation at a given moment, was not such as to bring into relief the phenomenon which is of great importance for the Italian economy, of under-employment in agriculture. The extent of this phenomenon can be ascertained only by calculating the total number of days lost *during the whole of the agricultural year.*

5. — Our conclusion is that the *general picture of the labour force* given by the ISTAT, shows first of all a mass of unemployed in the *strict sense* (*i.e.* persons without any kind of work) numbering over 1,286,000 persons, to whom must be added at least 258,000 others who are engaged in odd jobs for less than 15 hours a week. Thus we reach a total *one and a half million unemployed.* Next we have *2,800,000 workers on short time*, who may be described as under-employed; and, lastly, come the large body of employed numbering 13,400,000. This classification, however, takes no account of *seasonal* unemployment. Nor does it make allowance for the phenomenon of *under-employment in agriculture.*

The Special Revision of the Registration Lists at the Labour Exchanges.

6. — The ISTAT census is supplemented by the special revision of the lists kept by the Labour Exchanges (the so-called « official » labour market) made on September 30th, 1952, by the Ministry of Labour. From this it appears that the persons registered at the Labour Exchanges numbered in all 1,715,710, classified as follows (13):

(12) Exclusive of the Armed Forces, and of the employed persons who were not at work during the week of the enquiry.

(13) In conformity with the Act of 29 April 1949, No. 264, the entries are classified under five heads, *i.e.*:

Class 1: persons who are unemployed by reason of having lost the job on which they were engaged immediately before they became unemployed;

Class 2: young people under 21, and others in search of a first job, or discharged from the army;

Class 1	1,033,673
» 2	501,368
» 3	107,547
» 4	34,399
» 5	38,723
	1,715,710

The two first classes represent the *unemployed* proper, and should be considered apart from the other three classes, which include housewives, persons in receipt of pensions, and employed persons in search of another occupation (14).

(a) The group of the unemployed « proper » (the first 2 classes) accounts, with its 1,535,041 entries, for the great majority (89.47 per cent) of the persons registered. The group falls in its turn into two sub-groups: that « of workers formerly employed » numbering 1,033,673 (or 67.34 per cent of the group and 60.25 per cent of the total number registered), and that of « persons seeking a first job » numbering 501,368 (or 32.66 per cent of the group and 29.22 per cent of the total number registered). The total of the unemployed is equivalent to 3.28 per cent of the total population. It consists to the extent of 69 per cent of men (70.5 per cent for class 1 and 64.7 per cent for class 2). 42.77 per cent of the unemployed are in Northern Italy, 15.34 per cent in Central Italy, 31.27 per cent in Southern Italy, and 10.62 per cent are in the Islands. Young people under the age of 21 account for 24.18 per cent of the total. As regards the individual economic sectors, the data are not divided according to the five classes distinguished above; the available figures refer only to total number of registrations for all five. Given the great numerical superiority of the two first classes, however, we may take the total figures as being sufficiently indicative of the structure of unemployment proper. The percentages of the total attributable to the several sectors of the economy are as follows:

Agriculture	21.4
Industry	44.4
Transport and communications	1.0
Banking and insurance	1.5
Commerce	2.3
Sundry occupations and services	7.7
Labourers	19.7
Clerical workers	2.0
	100.0

It thus appears that the great mass of «registered» unemployment is represented, on the «official» labour market, by workers who were formerly occupied in industry, and who have been dismissed or have left their jobs; and they are largerly concentrated in Northern Italy.

(b) Of the remaining 180,669 persons registered, about 60 per cent (107,549 persons) are women occupied in the home and seeking gainful employment. They come mostly from Emilia (22,833), Campania (11,338), Tuscany (9,971) and Lombardy (9,473). Another 19 per cent (34,399) consists of pensioners in search of work; of these largest number (11,342) are in Emilia. The remaining 21 per cent is accounted for by persons in search of other occupations (38,723); they are largely concentrated in Campania (9,838) and in the Abruzzi (5,934).

7. — Certain qualifications have to be kept in mind if we are to understand the real significance of these figures.

(a) The remark made above on the results of the ISTAT enquiry as to the *period* selected for the enquiry applies equally well to the Ministry of Labour survey. The September registrations leave out the considerable number of workers engaged in seasonal work (in agriculture and in building).

(b) Moreover, the registrations do not cover the very large number of persons who are practically unemployed but who do not register with the Labour Exchanges, either because

Class 3: women engaged in domestic activities in the home and seeking occupation outside;

Class 4: persons in receipt of pensions, seeking occupation;

Class 5: employed persons seeking a different occupation.

(14) See the Report on the *Revisione straordinaria degli iscritti nelle liste di collocamento*, Chap. IV, p. 92, Vol. 1, Part I, Proceedings of the Parliamentary Commission.

they do not know about them, or because they distrust their system of placing workers, or out of a misplaced sense of pride. This applies especially tho white-collar workers, and to Southern Italy, or more generally to all the « depressed » areas where the organization of the labour market is still in its infancy.

(c) Like the survey of the labour force made by the sample method, the enquiry into « registered » unemployment also, does not lend itself to the description and analysis of the complex and important phenomenon of *under-employment in agriculture.*

(d) On the other hand, a certain number of the persons registered, even in the case of the first two classes, cannot be considered as totally without work. Many register mainly with a view to receiving a dole, and supplementing by this means the scanty wages received for casual work or for steadly but badly paid work.

Comparison Between the ISTAT and Ministry of Labour Enquiries.

8. — While taking due account of the above qualifications, which stress the gaps and imperfections of the two fundamental enquiries, we may nevertheless attempt to compare their respective numerical results, taking the figures at their face value, and introducing some slight amendments in their classification.

To make the two enquiries roughly comparable we include as « unemployed » in the ISTAT figures those whom the ISTAT enquiry shows as « unemployed for less than 15 hours a week », and we exclude from the figures of the Ministry of Labour's enquiry, those registered as unemployed under the last three of its five classes.

As Table VII shows, the total volume of unemployment, defined in a very *restricted* manner, is estimated by both the enquiries at approximately *one and a half million persons*, of whom two thirds are men, and one third women. A direct comparison of the distribution between branches of economic activity is not possible, since the ISTAT makes the calculation only for the unemployed who were formerly employed, while the Ministry of Labour makes it for all the five classes considered. Both enquiries however confirm the prevalence of unemployment in industry, which is nearly twice that in agriculture, and accounts for about half of the total figure. In agriculture, on the other hand, *the prevalent phenomenon is under-employment*, a phenomenon which neither of the two enquiries has been able to cover but which is dealt with specifically by the I.N.E.A. enquiry.

TABLE VII - NUMBER AND DISTRIBUTION OF THE UNEMPLOYED BY CATEGORY, SEX AND ECONOMIC SECTOR AS SHOWN BY THE TWO ENQUIRIES

	Istat (a)		Ministry of Labour (b)	
	Thousands	%	Thousands	%
Formerly occupied .	867.3	56.1	1,033.7	67.3
Seeking first occupation	677.7	43.9	501.4	32.7
	1,545.0	100.0	1,535.1	100.0
Males	1,029.0	66.6	1,039.3	67.7
Females	516.0	33.4	495.8	32.3
	1,545.0	100.0	1,535.1	100.0
Agriculture . . .	242.4 (c)	27.9	366.8 (d)	21.4
Industry	428.2 (c)	49.3	762.7 (d)	44.4
Other occupations .	186.5 (c)	22.8	586.2 (d)	34.2
	867.1 (c)	100.0	1,715.7 (d)	100.0

(a) In the case of the ISTAT enquiry, persons occupied less than 15 hours a week have been included in the figures for the formerly occupied.

(b) For the first two classes only, unless otherwise stated.

(c) The distribution refers only to the unemployed who were formerly employed.

(d) The distribution refers to all persons registered at the Labour Exchanges.

It should, however, be noted *that while the two enquiries agree as to quantity there is serious disagreement as to «quality»*. While the ISTAT survey stresses the unemployment of the lower age groups (75 per cent of the unemployed are shown as being under 30), the Ministry of Labour survey gives much more weight to « adult » unemployment (only 49 per cent of the persons registered at the Labour Exchanges are under 30). Like two

intersecting circles, the two enquiries have a zone in common at the centre, and two separate zones at the sides, each revealing a special aspect of the phenomenon: that of the failure to find work among young people in search of their first job (ISTAT)., and the unemployment of adults who have already held jobs (Ministry of Labour). This points to a certain divergence — reflected in the two enquiries — between the « official » labour market and the real one. Thus the coincidence of the figures serves to indicate orders of magnitude rather than to give an exact description of the phenomenon in statistical terms.

The I.N.E.A. Enquiry on Under-Employment in Agriculture.

9. — In agriculture «idleness» among workers has characteristics which are very different from those prevailing in other sectors of the economy, especially in industry. It rarely appears in the form of *unemployment* proper (complete lack of work for an indeterminate period); almost always it appears in the form of *under-employment.* « All agricultural workers find work during part of the agricultural year, for shorter or longer periods, and none remain completely idle ». The degree of idleness cannot therefore be ascertained by taking a census of agricultural workers « *at a given moment* »; it has to be deduced by calculating *the number of days actually worked during the whole of the agricultural year*, and comparing them with the total number of available working days. This latter figure has been calculated for each area as the minimum number of days needed to enable the worker to be fully occupied after making allowance for periods of forced inactivity due to weather conditions, holidays, etc. (15).

Total under-employment in agriculture may therefore be estimated at 641 million man-days, equal to 35 per cent of the available working days (amounting to approximately 1,842 million). Expressed in terms of income, this means a *net loss of some 750 million lire per annum*, equal to approximately 7 per cent of the gross national income and to 10 per cent of the net private product in 1952. And this does not « take account of that still larger amount that is lost by agriculture as a result of prevailing low rates of compensation resulting from the heavy demographic pressure, an amount which cannot be estimated ».

(15) For more detailed information on the principles adopted in making the enquiry see G. Medici and G. Orlando, *Agricoltura e Disoccupazione: I braccianti della bassa pianura padana*; also G. Orlando, *Metodi di accertamento della disoccupazione agricola italiana*, in the « Rivista di Economia Agraria », March, 1952.

Table VIII - UNDER-EMPLOYMENT IN AGRICULTURE, 1951-52

	Man-days Worked Thousands	Total Man-days Available Thousands	Days of Under-Occupation	
			Total Thousands	Per man
Northern It. . .	556,815	729,317	172,502	63
Central It. . . .	221,905	367,962	146,057	112
Southern It. and Islands . . .	423,062	745,156	322,094	117
Total All Italy .	1,201,782	1,842,435	640,653	94

On an average, as may be seen from the last column of Table VIII, agricultural workers appear to be idle for 94 man-days out of the 270-280 available each year. *Therefore, if idleness in agriculture were expressed in terms of employment and unemployment, there would be 2.5 million permanently unemployed agricultural workers out of a total of 7.6 million.*

Under-employment in agriculture is highest in the South, where it reaches 43.2 per cent of the total available working days, as compared to 39.7 per cent in Central Italy and 23.7 per cent in Northern Italy. The highest peaks are found in Calabria (55.9 per cent), the Abruzzi (55 per cent), Campania (50.5 per cent), Sardinia (48.8 per cent) and Sicily (47 per cent). If we classify agricultural workers in two main groups, consisting of day labourers on the one hand and farmers (*coltivatori diretti*) on the other, we find that among the first group (numbering 1,876,000 person) under-employment amounts to 54.3 per cent of the total number of available working days

and among the latter (4.930,000 persons) to 32.4 per cent.

TABLE IX - UNDER-EMPLOYED AMONG DAY LABOURERS AND FARMERS

	Days Worked	Total Number of Available Days	Under-employment	
			Thousands	% of available days
Day labourers . .	232.2	508.4	276.2	54.3
Farmers (*coltivatori diretti*) . . .	902.7	1,336.1	433.4	32.4

The effective employment may be divided into « ordinary » and « extraordinary » agricultural work, giving the following proportions:

TABLE X - EMPLOYMENT IN « ORDINARY » AND « EXTRAORDINARY » AGRICULTURAL ACTIVITY

	Man-days Actually Worked	
	Thousands	% of total
1. *Ordinary agricultural activities* .	1,120,634	93.2
2 *Extraordinary agricultural activities*	81,148	6.8
of which :		
– due to government intervention	71,842	5.9
(a) through the fixing of the number of men to be employed	18,958	1.5
(b) through work camps (*cantieri di lavoro*) and reforestation .	30,967	2.5
(c) through land-reclamation works	21,917	1.8
– due to seasonal emigration and non-agricultural activities . .	9,306	0.7
Total . . .	1,201,782	100.0

Government intervention through work camps (*cantieri di lavoro*), through land-reclamation, and through the fixing of the number of men to be employed on farms, has therefore accounted for about 6 per cent of total agricultural employment.

We may conclude that agricultural under-employment is of fundamental importance, affecting more than one third of the labour force in agriculture. Its principal causes are two. The first is in the demographic pressure which leads to an *exceptionally high density of the agricultural population in Italy*. Table XI (16) affords eloquent proof of this.

TABLE XI - PRODUCTIVE LAND AVAILABLE PER AGRICULTURAL WORKER IN SELECTED COUNTRIES

Countries	(Hectares)	Countries	(Hectares)
Belgium	2 78	Great Britain . .	15.34
Czechoslovakia . .	3.42	Spain	4.10
Denmark	5.64	Holland	3.85
France.	4.46	United States . .	23.64
West Germany . .	2.53	Japan	0.34
Italy	1.76	Egypt	0.57

The density of the population engaged in agriculture in Italy is exceeded only by that prevailing in Egypt and Japan. The second cause is the *extreme irregularity of the so-called « work diagrams »* which fluctuate between very high points in harvest times and very low points in the dead seasons.

There is therefore need, on the one hand, to lighten the pressure of population in the agricultural areas, and to absorb the « surplus » labour in other activities (17). On the other hand, there is need to rationalise the organisation of agriculture by introducing supplementary crops, and secondary industrial processes, by intensifying animal husbandry, etc., so as to secure greater regularity throughout the year in the demand for labour, and thus provide steady employment.

The reduction of the density of the rural population would not alone help to eliminate under-employment; sometimes, as in the typical case of mountain depopulation, it might even aggravate conditions in the poorer areas, and lower the income.

The Enquiry of the I.S.E. on Labour Turnover in Industry.

10. — The enquiry made by the Institute for Economic Studies (I.S.E.) throws light on an important aspect of the problem of *labour mobility*, and *especially on that of mobility*

(16) Taken from G. MEDICI and G. ORLANDO, *op. cit.*, p. 54.

(17) On this point see A. MOLINARI, *Future responsibilities of Italian industry*, in No. 1 of this Review.

between firms on « labour turnover ». Labour turnover in the broad sense covers all the movements of employed workers; in a more limited sense it may be calculated for a single economic sector, *e.g.* for industry, or for a single concern through a statistical investigation of the rate of engagements and dismissals of workers over a given period (18).

The I.S.E. first of all established — on the basis of the Italian demographic situation — *that the minimum level of « biological » turnover* (*i.e.* the turnover that is brought about exclusively by the natural movement of the population) is 2 per cent *of the total body of employed workers*. It then attempted through its enquiry — made as we have said for a representative group of industrial firms — to ascertain *the actual rate of turnover in Italian industry in 1950 and 1951*. The results, given separately for workers and clerical employees in the several sectors considered, are summarised in Table XII. The data refer to 1951.

TABLE XII - RATES OF LABOUR TURNOVER

	Workers (a)		Clerical Employees (b)	
	Entering	Leaving	Entering	Leaving
Industry	(2)	(2)	(2)	(2)
Mining and Quarrying .	14,07	12,15	7,04	5,99
Textile	8,07	6,50	4,66	4,24
Metal	4,23	7,18	5,71	6,42
Engineering	4,19	6,20	3,42	4,74
Chemical	12,79	10,11	23,64	18,21
Electric	6,71	5,68	5,10	5,58
Sundry	7,62	6,31	3,23	4,02
Total . . .	7,00	7,46	9,22	8,44

(a) The workers on the pay-rolls of the concerns considered by the enquiry are 221,806 and the clerical employes 32,155. The total of 253,961 represents 8.6 per cent of the total number of persons engaged in the branches considered (2,963,220 according to the census of 5/11/1951).

(b) Exclusive of those entering or leaving by reason of their being merely transferred from one plant to another.

(18) For the meaning of « labour turnover » an for an analysis of the methods of calculation used, see E. CARANTI, *Aspetti del Labour Turnover*, in « Rassegna di Statistica del Lavoro », 3, 1951, p. 150; L. URSELL, *Technical Note on Labour Turnover*, U.S. Bureau of Labor Statistics, Washington, 1948, pp. 496-504; F. VINCI, *La mobilità della mano d'opera durante la guerra*, in « Rivista delle Società Commerciali », 8, 1918, p. 685; P. F. BRISSEUDEN - E. FRANKEL, *Labor Turnover in Industry, a Statistical Analysis*, New York 1922, p. 13.

The table shows that the total rate of turnover for workers fluctuated between 7 and 8 per cent. The highest percentages are found in mining and quarrying and in the chemical industry. In the case of clerical employees the average rate fluctuates between 8 and 9 per cent, and here again the percentages are highest in the chemical industry.

On the average for industry as a whole, then, the rate of turnover does not exceed 10 per cent and in some branches it closely approaches the « minimum » level of 2 per cent. A comparison of these figures with the data for labour turnover in 1951 in Great Britain and the United States, points to the low availability of employment opportunities in our country as compared with the high availability met with in countries which are more highly developed and which have approximately full employment, such as the Anglo-Saxon countries.

TABLE XIII - RATES OF LABOUR TURNOVER IN GREAT BRITAIN AND THE UNITED STATES

	Figures per 100 workers	
	Entering	Leaving
Gran Britain	36,2	37,1
United States	53,1	52,4

Labour turnover in the United States reaches one half the total number of persons employed; this figure represents the highest degree of labour-mobility to be found anywhere in the world.

The low availability of employment opportunities leads of course to a high degree of seniority in the labour force employed in industry. Thus those with less than 5 years seniority account for only 18 per cent of the workers and 19 per cent of the clerical employees while those with 5 to 9 years seniority account for 35 per cent of the total number both of workers and of clerical employees, and those with 10 to 14 years seniority for 21 per cent of the workers and 24 per cent of the clerical employees.

Average seniority is therefore very high: 11 years and 3 months for workers, and 11 years and 9 months for clerical employees.

In consequence, the *average age of the employees is also high: 40 years and 2 months for workers and 41 years and 3 months for clerical employees.*

The low availability of employment opportunities and the high average seniority and age of the workers are factors of « inertia » in the structure of Italian industry and contribute towards accentuating its static and conservative features.

Conclusions.

11. — The general results of the four enquiries, and the comparison between them, allow us to draw some summary conclusion about the « idle » labour force in Italy.

(a) Unemployment in Italy does not affect a single area of the labour supply but extends with varying intensity over the whole labour market, and is a feature of the whole Italian economic structure. The excess of population, arising from the inadequate rate of growth of production, either stagnates over wide areas (the areas of unemployment proper) or else vitiates the whole system of employment, giving rise to wide-spread under-employment, poor employment, and employment at low levels of remuneration.

(b) The first and preliminary results of the enquiries made by the ISTAT and the Ministry of Labour indicate that, roughly speaking, one and a half million workers are unemployed in the strict sense of the word, and that a condition of under-employment exists for over 2 million workers who are on short time.

(c) Under-employment in agriculture, which has been the subject of a special enquiry, apparently extends to more than one third of the total labour force engaged in agricultural activities: expressed in terms of full-time unemployment this would be equivalent to 2½ million unemployed workers.

(d) The data and estimates available on the length and intensity of unemployment, data which are also incomplete, point to the existence of a « chronic » mass of unemployed, accounting for more than half the total number of unemployed, and to another fluctuating mass whose unemployment is due to seasonal, cyclical, and technological factors, etc.

(e) The data on labour turnover point to the rigidity in the structure of Italian industry, and to static and conservative tendencies.

(f) The other analytical data obtained from the enquiries — above all those on « idleness » among the labour force in the several economic sectors and geographical regions — confirm the opinion that the cause of unemployment in Italy lies more especially in the excess agricultural population which is not absorbed by industrial development and by ancillary activities. The excess of the population in relation to available resources is especially noticeable in the mountain areas, in the depressed areas under extensive cultivation, belonging to the large estates (*latifondi*) of the South and Islands, and in the areas in the lower valley of the Po and in Apulia which are farmed by capitalistic undertakings and where extensive cultivation also prevails. This surplus population tends to migrate to the industrial areas of the North and Centre, where its presence gives rise to conditions of chronic unemployment.

Rationalisation of Banking Services at an International Level

(A letter from a Banker)

Dear Sir. — Voices are frequently raised in many countries — often by persons of authority — urging the need for devoting new efforts to improving the internal organisation of the banks, so as to rationalize their services, increase their working efficiency, and reduce their costs of operation. Indeed, notable efforts are now being made by the banks in many countries to secure rationalisation.

But daily banking practice shows that those responsible for the organisation of the individual banks in the various countries, while they organise their own services very well, help at the same time to complicate — I might almost say to disorganise — the work of the other banks.

This assertion may seem paradoxical; but it is confirmed by practical experience. A few examples will suffice to justify it.

In the first place the task with which the banks begin their day's work, the opening of the vast quantity of incoming mail, is the source of much loss of time. The correspondence has to be sorted, and distributed to the several offices, but as different banks use for the same operation forms of different size, colour and wording the distribution is far from being automatic. This great variety derives from the fact that each bank wishes to have its own forms, differing from those used by its competitors; each wishes to have a style and colour of its own, and as forms are used for most of the correspondence of the big banks, this lack of uniformity makes the task of sorting slow and difficult... Meantime, the offices are waiting to attend to the correspondence, and this delay means that when they are finally able to get work they have to do it in feverish haste, a fact which certainly contributes towards increasing the number of errors.

Errors are all the more easily made in so far as the variety of the forms also complicates the task of the executive offices. To illustrate this point I will mention only two of the most commonplace cases.

I have before me the forms used by two big foreign banks, whose head offices are in the same town, for debiting and crediting accounts. Now, one of these banks uses forms printed in red for the debit entries and forms printed in blue for the credit entries; the other does precisely the reverse.

For many of those among us who have been in the service for a number of years, it used to be a strict rule that the amounts entered on the left hand side of a form were debits, while those entered to the right were credits. The new generations have organised things so well that our book-keepers must now look to see whether the amount in question is to be debited or credited, because that simple mechanical rule is no longer universally followed, nor has it been universally replaced by the opposite practice.

The checking of the signatures to incoming letters deserves a chapter to itself. Apart from the fact that the great majority of bank officials, especially in certain European countries, take pride in quite illegible signatures, the different lists of signatures are of different size and are compiled by different methods. It is no exaggeration to say that half of the time devoted by the clerks to this very important but tiresome work, is wasted. And why do not the banks when forwarding to one another the innumerable orders for payments to third parties attach a copy to be transmitted to the payee, a copy which would relieve the bank receiving the order of the necessity of preparing a separate statement indicating by whose order and on whose behalf and for what reason, the remittance is made?

And then there are the forms drawn up in three or four languages, in very small type, one on top of the other! What an effort of eyesight and attention is required to decipher and register them!

The responsibility for this confusion cannot of course be ascribed to the individualism of the banks alone. An involuntary contribution is also made by Governments, administrative bodies, and industrial and commercial companies, which issue great parcels of securities, each of a different size, with coupons attached or else detached. And perhaps still more to blame are the insurance and shipping companies. Thousands of insurance policies and bills of lading, all of different shapes, colours and texts, pass through the hands of the harrassed bank clerks who, in order to check a simple, but usually basic condition

prescribed for opening a credit, have to look for it now to the right, now to the left, sometimes on top, sometimes at the bottom, either on the front or on the back of the form.

Nor do the commercial customers facilitate matters. We have only to think of the bills or drafts sent in for collection; each uses a different formula entailing loss of time in finding the date of maturity, the place of payment, etc. And why are not telegrams delivered in duplicate by the telegraph offices so as to save us the trouble of copying the telegram we have to mail to the sender as confirmation?

But perhaps in asking these questions we may seem to be looking for the mote in the eye of others, seeing that the banks themselves are guilty of tormenting their customers with forms that are real puzzles with their arrows and cabalistic signs.

Why do not we bankers, in the various countries, set an example by standardising and simplifying our forms and procedures? It should not be difficult gradually to reach an agreement, and if other business groups — above all the insurance companies and the shipping companies — were to join us, valuable results might be achieved which would increase efficiency and reduce costs.

Many other savings might be made, if our work in all fields were coordinated; savings trifling in themselves but which when added together amount to large sums. Here again we should remember the old rule of banking which says that it depends on earning small margins on thousands of operations. Let me quote two instances from every day experience.

Going over the letters received from a foreign correspondent, we note that during one month 102 debit entries have been made for expenses under various headings, all for amounts of less than 2 dollars each. The 102 entries could be reduced to a single entry for the month, if the expenses were noted on the relevant forms on a detachable counterfoil with the indication that the expense in question will be included in the total amount debited at the end of the month.

Banks receive every day innumerable telegrams containing orders for payment, notification of the opening of credits, etc., which have to be marked with ciphers for checking purposes. Each order of this kind bears a signature which could be omitted, thus saving expense. The method to be adopted for this purpose might be as follows: an agreement could be reached by all the banks in a given locality that each of them will adopt a code mark consisting of two letters: the telegraphic code should be devised in such a way that the total sum of the code numbers does not exceed 999 (which would not be difficult to do), and it should then be converted into three letters which should always be preceded by the two letters representing the regular code signature referred to above. This would do away with the need for signing the telegram.

I could give many more such examples, which, however, would be superfluous for the purposes of these simple remarks. The general aim, I may emphasize once again, should be to encourage the banks of the various countries to study seriously the possibility of unifying and simplifying their methods of operation and instruments of work. With this end in view it might be desirable to:

(a) Call an international meeting of banking experts to make a preliminary study of the question, and lay the foundations for effective action leading to coordination. Meetings of this kind — devoted to the study of problems of « productivity » in our branch of work — should be held with the participation of representatives of the insurance companies and shipping companies, and of the leading manufacturers of office machines.

(b) Set up a permanent International Centre for the study of problems relating to the improvement of our working methods. Yours faithfully.

FEDERICO POLLAK

STATISTICAL APPENDIX

ITALIAN BUDGET SUMMARY

(milliards of lire)

Table A

Fiscal year beginning 1st July	Revenue			Expenditure			Deficit			
	Assessed		Collected (a)	Obbligated		Paid out (a)	Obbligated			Cash
	Current	Movement of capital		Current	Movement of capital		Current	Movement of capital	Total	
1938–39	28	3	. . .	40	2.8	. . .	— 12	+ 0.2	— 11.8	. .
1946–47	352	335	668	932	303	874	— 580	+ 31	— 549	— 206
1947–48	828	200	822	1,547	262	1,327	— 719	— 66	— 785	— 205
1948–49	1,015	45	1,020	1,519	98	1,440	— 504	— 53	— 557	— 402
1949–50	1,449	344	1,603	1,7.	213	1,687	— 322	+ 131	— 191	— 84
1950–51	1,676	247	1,617	1,853	341	1,776	— 177	— 94	— 271	— 159
1951–52	1,720	337	1,943	2,206	274	2,276	— 486	— 63	— 423	— 333
1952–53 (b)	1,362	264	1,592	1,695	100	1,525	— 333	— 164	— 497	+ 67
1953–54 (c)	1,787	26	—	2,153	78	—	— 366	— 52	— 418	—

(a) Current revenue and movement of capital; on year account and arrears.
(b) Period 1st july - 31 March.
(c) Estimates.
Source: *Conto riassuntivo del Tesoro.*

CURRENT REVENUE BY MAIN CATEGORIES (a)

Table B

Sources	1952–53		1953–54		
	Millions of lire	%	Millions of lire	%	Increase (in millions of lire)
1. - *Revenue from Taxation:*					
— Direct Taxes	337,300.0	19.79	340,290.0	19.09	+ 2,990.0
— Indirect taxes on transactions (b)	518,594.0	30.43	599,035.0	33.50	+ 80,441.0
— Custom duties and consumption taxes	334,321.0	19.63	384,401.0	21.50	+ 50,080.0
— Consumption taxes on State monopolised products	254,740.0	14.96	280,957.5	15.70	+ 26,217.5
— Lotteries	25,700.0	1.51	30,260.0	1.69	+ 4,560.0
— Other Taxes	94,955.5	5.57	83,060.2	4.65	— 11,895.3
	1,565,610.5	91.89	1,718,003.7	96.13	+ 152,393.2
2. - *Other Revenue* (c)	18,220.6	1.07	19,102.0	1.07	+ 881.4
	1,583,831.1	92.96	1,737,105.7	97.20	+ 153,274.6
3. - *Revenue from M.S.A. Funds*	120,000.0	7.04	50,000.0	2.80	— 70,000.0
Total	1,703,831.1	100.00	1,787,105.7	100.00	+ 83,274.6

(a) Estimates at the beginning of the financial year.
(b) Turnover tax (which accounts for about 60% of the group), taxation of succession, stamp duty, etc.
(c) Net income from the national estate and from autonomous public corporations (railways, postal service, etc.).

ITALIAN DOMESTIC PUBLIC DEBT

(milliards of lire - Index Numbers, 1938 = 100)

Table C

End of period	Consolidated and others		Redeemable debt		Floating debt					Treasury notes	Total of domestic public debt	
					Treasury bills	Interest bearing current accounts	Advances by the Bank of Italy	Total				
	Amount	I. N.	Amount	I. N.				Amount	I. N.		Amount	I. N.
1938 - June	53	100	49	100	9	20	1	30	100	1.5	133.5	100
1949 - June	53	100	392	800	744	479	470	1.693	5,643	8.4	2,146.4	1,608
1950 - June	53	100	586	1,196	719	628	490	1,837	6,123	9.0	2,486.0	1,862
1951 - June	53	100	691	1,410	817	770	471	2,058	6,860	9.0	2,811.0	2,106
1952 - March	53	100	829	1,681	926	792	471	2,189	7,296	10.6	3,081.6	2,224
June	53	100	829	1,681	920	822	471	2,213	7,376	15.0	3,110.0	2,329
September	53	100	829	1,681	936	830	471	2,237	7,456	21.0	3,140.0	2,352
December	53	100	824	1,681	938	886	456	2,282	7.606	29.7	3,188.7	2,388
1953 - January	53	100	824	1,681	924	919	455	2,296	7,653	31.4	3,204.4	2,400
February	53	100	824	1,681	909	917	454	2,280	7,600	32.9	3,189.9	2,389
March	53	100	1,025	2,091	896	922	453	2,271	7,570	34.4	3.383.4	2,534

Source: *Conto riassuntivo del Tesoro.*

Table D

DEPOSITS AND CURRENT ACCOUNTS IN ITALIAN BANKING SYSTEM AND POSTAL SAVINGS BANKS
(index numbers, 1938=1)

End of period	Banking System (a)						Postal Savings Banks						Percent ratio to deposits and c/a of banking system
	Deposits		Current Accounts (b)		Total		Deposits		Current Accounts		Total		
	Milliards of lire	Index numbers	Milliards of lire	Index numbers	Milliards of lire	Index numbers	Milliards of lire	Index numbers	Milliards of lire	Index numbers	Milliards of lire	Index numbers	
1948	805	21	715	41	1,520	27	342	12	51	46	393	13	25.8
1949	1,016	27	933	55	1,949	35	522	18	135	122	657	22	33.7
1950	1,172	31	1,063	62	2,235	41	689	24	128	116	816	27	36.5
1951 - March	1,180	31	1,091	64	2,271	41	715	25	137	124	852	28	37.5
June	1,188	31	1,090	64	2,278	41	731	25	152	138	883	29	38.8
September	1,257	33	1,179	69	2,436	44	755	26	143	130	898	30	36.9
December	1,364	36	1,324	78	2,688	49	796	27	160	145	956	32	35.5
1952 - March	1,420	37	1,355	80	2,775	50	834	29	149	135	983	33	35.4
June	1,455	38	1,435	84	2,890	52	855	29	172	156	1,027	34	35.5
September	1,567	41	1,510	88	3,077	56	890	31	190	173	1,080	36	35.1
December	1,688	44	1,647	96	3,335	60	963	33	197	179	1,160	38	34.7
1952 - January	1,703	45	1,626	95	3,329	60	990	34	193	175	1,183	39	35.5
February	1,714	45	1,613	94	3,327	60	1,003	34	192	174	1,195	39	35.9
March	1,730	45	1,657	97	3,388	61	1,008	35	189	171	1,197	39	35.3

(a) The data refer to 365 banks (commercial and saving banks) which hold about 99% of the total deposits collected by all Italian banks.

(b) Inter-bank current accounts are excluded.

Source: *Bollettino* of the Bank of Italy.

DEPOSITS, CURRENT ACCOUNTS AND ASSETS OF ITALIAN BANKS (a)
(millions of lire)

Table E

Items	31.12.48	31.12.50	31.12.51	31.3.52	30.6.52	30.9.52	31.12.52
Amount outstanding							
Deposits and current accounts	1,520,278	2,234,906	2,686,037	2,776,883	2,893,738	3,077,309	3,335,350
Cash and sums available at sight	169,048	221,621	294,938	224,778	219,283	234,793	345,027
Fixed deposits with the Treasury and other Institutions	177,748	280,417	342,529	392,791	399,324	475,774	423,403
Government Securities (b)	397,479	516,469	610,698	682,513	694,284	701,212	674,720
Credits to clients (c)	1,145,931	1,801,656	2,135,381	2,165,849	2,230,372	2,370,410	2,649,294
Index Numbers: 31-12-1948=100							
Deposits and current accounts	100	147.0	176.8	182.6	191.6	202.4	219.3
Cash and sums available at sight	100	131.0	174.5	133.0	129.7	138.8	204.1
Fixed deposits with the Treasury and other Institutions	100	157.7	192.7	221.0	224.6	267.6	238.2
Government Securities (b)	100	129.9	153.6	171.7	174.6	176.4	169.7
Credits to clients (c)	100	157.2	186.3	189.0	194.6	206.8	231.1
% of deposits and current a/cs							
Cash and sums available at sight	11.1	9.9	10.9	8.0	7.6	7.6	10.3
Fixed deposits with the Treasury and other Institutions	11.7	12.5	12.7	14.1	13.8	15.4	12.6
Government Securities (b)	26.1	23.1	22.7	24.5	23.9	22.7	20.2
Credits to clients (c)	75.3	80.6	79.4	77.9	77.0	77.0	79.4

(a) The data refer to 365 banks (commercial and savings banks) which hold about 99% of the total deposits collected by all Italian banks.

(b) Treasury bills and other Government securities. Nominal value.

(c) Includes: bills on hand, rediscount at the Bank of Italy, contangoes, advances, current accounts, credits abroad, loans recoverable on salaries, credits on note of hand, mortgage loans, current accounts with sections for special credits, non-Government securities, participations.

Source: *Bollettino* of the Bank of Italy.

NOTE CIRCULATION, PRICES, WAGES AND SHARE QUOTATIONS IN ITALY

(Index Numbers, 1938=100)

Table F

Year or month	Note Circulation (a)		Wholesale prices (c)		Cost of Living (c)	Wage rates in industry (c)	Share quotations (b)	Fine gold	
	Amount (b) (milliards of lire)	Index	All commodities	Foodstuffs				Price of one gram (lire) (d)	Index
1949 December	1,058.2	4,703	4,747	4,954	4,753	5,791	1,511.3	957	3,680
1950 December	1,176.1	5,228	5,406	5,567	5,009	5,962	1,589.1	919	3,535
1951 December	1,304.2	5,796	5,454	5,355	5,416	6,685	1,714.9	885	3,403
1952 March	1,216.3	5,408	5,323	5,149	5,475	6,732	1,930.4	859	3,304
June	1,224.5	5,422	5,133	5,491	5,559	7,055	1,872.3	795	3,058
September	1,307.3	5,819	5,265	5,511	5,615	7,380	2,036.9	794	3,054
October	1,302.7	5,789	5,272	5,579	5,626	7,426	2,152.9	782	3,007
November	1,298.0	5,768	5,292	5,581	5,631	7,426	2,278.0	775	2,980
December	1,411.1	6,271	5,288	5,624	5,612	7,426	2,316.6	770	2,961
1953 January	1,329.4	5,909	5,264	5,614	5,603	7,426	2,492.1	789	3,035
February	1,307.1	5,809	5,243	5,579	5,614	7,525	2,452.5	778	2,992
March	1,313.5	5,838	5,260	5,648	5,613	7,525	2,344.8	765	2,942

(a) End of year or month. Includes: Bank of Italy notes and Treasury notes; (b) *Bollettino* of the Bank of Italy; (c) *Bollettino Mensile di Statistica* issued by the Central Institute of Statistics; (d) Business Statistics Centre of Florence.

PRICES AND YIELDS OF ITALIAN SECURITIES BY MAIN CATEGORIES

(annual or monthly averages)

Table G

Year or month	Government Securities								Share Securities	
	Bonds				Treasury Bonds		Average			
	Consolidated		Redeemable							
	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)	Price (index number '38=100)	Yield (per cent per annum)
1949 - a. av.	105.9	5.10	96.1	5.89	94.6	5.59	96.0	5.68	1,567.7	3.97
1950 - » »	105.4	5.13	93.4	6.06	93.6	5.68	93.6	5.83	1,528.2	5.44
1951 - » »	101.9	5.30	88.2	6.42	97.3	6.06	89.1	6.12	1,676.2	6.56
1952 - » »	101.5	5.32	87.3	6.48	87.1	6.07	88.6	6.15	1,618.3	7.12
1951 - June	100.9	5.35	87.3	6.48	85.2	6.21	87.5	6.23	1,714.9	6.59
December	100.1	5.34	90.6	6.25	89.2	5.93	91.3	5.97	1,988.5	6.19
1952 - March	99.6	5.42	87.3	6.48	86.4	6.12	88.2	6.18	1,930.4	6.13
June	100.9	5.35	90.6	6.25	92.0	5.75	93.3	5.84	1,872.3	6.57
September	102.3	5.28	94.5	5.99	93.1	5.68	95.1	5.73	2,036.9	6.18
December	102.5	5.27	91.0	6.22	87.9	6.02	90.4	6.03	2,316.6	5.54
1953 - January	101.5	5.32	90.6	6.25	86.4	6.12	89.3	6.10	2,492.1	5.25
February	100.7	5.36	90.1	6.28	85.7	6.17	88.6	6.15	2,452.5	5.46
March	100.4	5.38	88.9	6.37	86.3	6.13	88.8	6.14	2,344.8	5.31

Source: *Bollettino* of the Bank of Italy.

WHOLESALE PRICES BY GROUPS OF COMMODITIES

(Index Numbers, 1938=100)

Table H

Year or month	All Commodities	Foodstuffs		Textiles	Hides, Skins and Footwear	Raw materials, metal and engineering products	Fuels and lubricants	Chemical raw materials and products	Lumber	Paper goods	Bricks, Lime and Cement	Glass
		Vegetable	Animal									
1949 - a. av.	5,169	4,830	6,481	5,939	4,609	5,402	3,945	5,603	5,663	4,726	6,108	4,903
1950 - » »	4,905	4,746	6,401	6,015	4,191	5,228	3,784	5,302	5,677	4,778	6,106	4,928
1951 - » »	5,581	4,821	7,289	7,621	5,213	6,689	4,666	6,008	7,250	8,318	6,603	4,878
1952 - » »	5,270	4,869	6,696	6,343	4,245	6,767	4,440	5,717	8,344	6,246	7,216	4,707
1951 - June	5,595	4,842	6,970	7,830	4,619	6,708	4,745	6,132	7,272	8,610	6,680	4,886
Dec.	5,454	4,634	7,724	7,053	4,669	6,804	4,645	5,875	8,311	7,843	6,993	4,707
1952 - March	5,323	4,709	6,969	6,604	4,406	7,060	4,597	5,866	8,599	7,340	7,150	4,707
June	5,133	4,668	6,295	6,241	3,945	6,777	4,386	5,718	8,419	6,168	7,220	4,707
Sept.	5,265	4,987	6,675	6,194	4,292	6,686	4,343	5,588	8,133	5,362	7,357	4,707
Dec.	5,288	5,141	6,757	6,014	4,230	6,396	4,310	5,530	8,372	5,320	7,240	4,707
1953 - Jan.	5,264	5,180	6,620	6,009	4,311	6,200	4,277	5,491	8,404	5,281	7,238	4,707
Febr.	5,243	5,212	6,415	6,016	4,270	6,079	4,218	5,425	8,404	5,286	7,246	4,644
March	5,260	5,272	6,503	6,024	4,255	5,959	4,155	5,412	8,404	5,302	7,233	4,644

Source: *Bollettino Mensile di Statistica.*

NATIONAL INDEX OF LIVING COST

(1938 = 100)

Table I

Year or month	All Items	Foodstuffs	Clothing	Heating and lighting	Housing	Miscellaneous
1949 - a. av.	4,915	6,069	5,956	3,255	543	4,469
1950 - » »	4,849	5,877	5,742	3,480	730	4,610
1951 - » »	5,320	6,279	6,975	3,746	1,232	5,248
1952 - » »	5,546	6,541	6,415	4,031	1,565	5,501
1951 - June	5,394	6,412	7,108	3,687	1,260	5,108
December	5,416	6,353	6,854	3,956	1,279	5,522
1952 - March	5,475	6,419	6,596	3,997	1,539	5,532
June	5,559	6,566	6,410	3,991	1,576	5,436
September	5,615	6,651	6,261	4,077	1,618	5,491
December	5,612	6,633	6,218	4,100	1,656	5,516
1953 - January	5,603	6,617	6,212	4,118	1,656	5,523
February	5,614	6,621	6,621	4,122	1,705	5,540
March	5,613	6,619	6,619	4,105	1,705	5,546

Source: *Bollettino Mensile di Statistica.*

WAGES AND SALARIES IN ITALY

(gross retributions - inclusive of family allowances)
(Index Numbers, 1938 = 100)

Table L

Categories	1951	1952	1952		1953		
	a. av.	a. av.	September	December	January	February	March
Industry:							
Specialized workers	5,616	6,199	6,428	6,469	6,469	6,542	6,542
Skilled workers	6,182	6,846	7,119	7,165	7,165	7,237	7,237
Ordinary workers and semi-skilled labourers	6,544	7,268	7,570	7,617	7,617	7,718	7,718
Labourers	7,013	7,836	8,179	8,224	8,224	8,371	8,371
General index of Industry	6,386	7,090	7,380	7,426	7,426	7,525	7,525
Agriculture	7,101	7,464	7,439	7,999	7,999	7,999	7,999
Government Civil Employees:							
Group A (a)	3,373	3,766	3,962	3,962	3,962	3,962	3,962
Group B (b)	3,424	3,759	3,927	3,927	3,927	3,927	3,927
Group C (c)	4,223	4,536	4,693	4,693	4,693	4,693	4,693
Subordinate staff	4,928	5,174	5,297	5,297	5,297	5,297	5,297
General Index of Government Civil Employees	3,936	4,262	4,425	4,425	4,425	4,425	4,425

(a) Administrative grade; (b) Executive grade; (c) Clerical grade.
Source: *Bollettino Mensile di Statistica.*

ITALIAN INDUSTRIAL PRODUCTION INDEXES (a)

(unadjusted, 1938 = 100)

Table M

Year or month	General Index	Mining	Manufactures										Electric Power
			Total	Food	Textiles	Lumber	Paper	Metallurgy	Engineering	Non metallic ores	Chemicals	Rubber	
1949 - a. av.	105	90	101	111	99	58	91	85	115	96	105	115	136
1950 - » »	121	101	116	134	104	59	106	105	122	119	127	132	160
1951 - » »	137	119	131	139	109	62	114	135	130	128	171	152	186
1952 - » »	143	145	136	146	105	62	113	150	142	136	172	142	183
1952 - March	138	139	132	144	104	68	111	143	134	138	169	134	183
June	139	132	131	139	96	62	106	149	142	133	166	131	200
September	150	155	144	147	117	61	115	162	160	136	173	155	195
December	149	157	142	169	112	55	120	141	143	139	183	150	200
1953 - January	149	180	141	151	110	53	126	138	151	141	184	149	205
February	140	166	133	140	109	56	121	125	147	137	167	146	185
March	154	181	148	151	117	60	129	136	162	173	193	161	192

(a) On the problem of index numbers on Italian industrial production, see this Review, No. 16, January-March 1951: *A Note on the Index Numbers of Italian Industrial Production*, by E. D'Elia, pag. 34.
Source: *Bollettino Mensile di Statistica.*

SOME BUSINESS INDICATORS

Index Numbers, 1948 (annual average)=100 **Table N**

Months	Number of rooms planned	Goods loaded and unloaded in Italian Ports	Number of telegrams dispatched	Sales in department Stores	Iron and steel Industry		Tourist Movement	Railways traffic
					Orders	Stoks		
1952 - January	384.6	160.6	135.8	199.0	156.5	122.2	145.7	123.5
February	317.7	167.3	136.1	170.0	253.7	119.8	140.0	119.0
March	356.8	181.6	129.3	186.5	194.3	126.3	182.7	120.1
April	330.1	168.1	145.0	260.8	153.9	128.9	356.0	115.9
May	375.6	167.1	147.2	243.2	219.7	127.3	330.2	117.3
June	483.4	171.0	145.4	278.5	191.1	135.8	443.9	115.3
July	468.0	169.9	149.9	245.0	209.0	134.9	640.2	119.9
August	282.1	169.1	136.6	195.7	187.3	155.6	931.2	112.6
September	288.0	175.6	156.0	271.5	224.0	158.3	603.8	130.2
October	422.4	168.5	157.6	351.3	210.2	155.5	366.5	130.2
November	385.9	168.0	144.7	324.8	266.8	154.4	212.5	119.7
December	322.3	164.7	155.2	583.8	124.6	156.3	209.0	118.0
1953 - January	331.6	181.1	141.4	293.9	137.2	159.3	158.9	115.4
February	423.5	194.3	146.5	227.0	135.7	156.9	161.1	120.8
March	372.8	177.3	151.2	280.7	202.7	153.6	239.9	112.3

Source: *Previsioni a breve termine*, by prof. L. Livi.

AUTOVEHICLES, TELEPHONES AND WIRELESS SETS IN ITALY **Table O**

Years	Autovehicles				Telephones		Wireless sets	
	Cars	Lorries	Total	Ratio population autovehicles	Numbers	Ratio population telephones	Numbers	Ratio population wireless sets
1938	289,174	80,589	369,763	118	...	..	978,392	44
1939	290,225	96,231	386,456	114	...	..	1,149,026	38
1940	270,356	82,958	353,314	126	...	..	1,352,566	33
1941	97,616	83,358	180,974	248	...	..	1,613,126	27
1942	73,790	72,068	145,858	309	...	..	1,801,151	25
1943	...	...	...	...	...	..	1,756,763	25
1944	...	...	...	...	...	..	1,581,982	28
1945	...	...	...	...	734,957	62	1,638,435	27
1946	149,649	135,933	285,582	161	834,854	55	1,819,717	25
1947	184,060	184,922	368,982	123	932,177	48	1,976,118	23
1948	218,539	191,680	410,219	111	1,014,321	45	2,204,580	20
1949	266,928	208,821	475,749	96	1,118,685	41	2,566,258	17
1950	342,021	222,766	564,787	82	1,219,913	38	3,135,195	15
1951	425,572	242,953	668,525	69	1,382,438	33	3,682,588	12
1952	...	...	...	..	...	..	4,227,609	11

PERSONAL EXPENDITURE ON ENTERTAINMENTS AND GAMBLING (a) **Table P**

Years	Gross National Product	Personal Expenditure on Entertainments and Gambling (a)			
		Total		Movie Pictures	
	Milliards of lire	Millions of lire	% of National Product	Millions of lire	% of National Product
1938	149	—	—	0,567	0.38
1947	6,195	58,224	0.94	28,472	0.46
1948	7,243	82,057	1.13	41,977	0.57
1949	7,503	102,760	1.38	53,393	0.71
1950	8,028	122,800	1.52	62,452	0.77
1951	9,613	138,900	1.44	72,040	0.74
1952	10,105	...	..	...	..

(a) Mainly sport gambling (foot-ball games).
Source: *Società Italiana Autodi Editori* - S.I.A.E. (Italian Authors and Publishers Association).

Table Q

MINIMUM AND MAXIMUM QUOTATIONS OF SOME ITALIAN COMPANIES QUOTED ON STOCK EXCHANGE
(Lire)

Companies	1952								1953	
	I Quarter		II Quarter		III Quarter		IV Quarter		I Quarter	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Financial ad Insurance										
Strade Ferrate Meridionali (Bastogi)	1,610	1,425	1,489	1,344	1,572	1,359	1,920	1,578	2,160	1,785
S.T.E.T. - Soc. Torinese Eserc. Telefonici	2,935	2,415	2,950	2,563	3,050	2,850	3,760	2,940	3,270	2,710
La Centrale	...	...	...	...	...	...	...	...	11,910	9,850
Pirelli & C.	6,745	6,195	7,010	6,180	8,230	6,990	10,630	8,025	11,910	9,850
Assicurazioni Generali	8,960	6,850	8,300	7,450	9,525	8,295	13,020	9,080	14,950	12,000
Riunione Adriatica di Sicurtà	3,720	1,950	4,000	2,540	5,600	4,000	6,300	4,700	6,950	5,250
Textiles										
Snia Viscosa	2,640	2,465	2,492	1,875	1,935	1,495	1,752	1,475	1,675	1,400
Chatillon - Soc. Ital. Fibre Tessili Art.	3,088	2,710	2,890	2,470	2,730	2,185	2,765	2,320	2,620	2,250
Linificio e Canapificio Nazionale	1,115	1,277	976	1,148	1,035	1,169	1,105	1,298	1,244	927
Cotonificio Vittorio Olcese	3,680	3,930	2,650	3,780	2,750	3,080	2,790	3,670	3,500	2,405
Cucirini Cantoni Coats	8,640	7,250	8,460	5,810	7,350	6,610	9,750	7,000	10,040	8,125
Cotonificio Cantoni	18,525	16,000	19,500	17,425	25,800	18,700	13,050	11,600	13,520	11,500
Lanificio Rossi	12,650	10,650	13,850	11,150	14,000	13,100	16,590	13,150	16,050	14,250
Minerals, Metals and Engineering										
Monte Amiata	2,638	1,900	2,620	2,220	2,960	2,395	3,805	2,850	3,970	3,600
Finsider A e B	862	577	743	639	770	583	710	614	724	515
Ilva Alti Forni e Acciaierie d'Italia	385	242	314	265	364	287	370	343	371	284
Dalmine	3,760	2,847	3,564	3,080	2,845	2,225	2,730	2,420	2,715	2,150
Terni	350	242	265	234	264	230	286	259	290	247
F.I.A.T.	521	478	510	436	529	461	618	522	664	601
Ansaldo	...	...	...	...	...	...	...	...	230	145
Bianchi Edoardo	...	...	...	...	...	...	...	...	146	132
Public Utilities										
Società Edison	2,136	1,931	2,047	1,900	2,193	1,998	2,470	2,107	2,780	2,402
C.I.E.L.I.	1,920	2,380	2,060	2,340	2,280	2,565	2,465	2,970	3,040	2,720
Soc. Adriatica di Elettricità	1,044	913	1,075	990	1,084	1,017	1,191	1,040	1,385	1,210
S.I.P. - Soc. Idroelettrica Piemonte	1,242	1,150	1,223	1,120	1,273	1,159	1,445	1,272	1,623	1,380
Soc. Meridionale di Elettricità	1.023	916	1,039	957	1,090	1,027	1,258	1,057	1,408	1,219
Soc. Elettrica Selt - Valdarno	3,574	3,020	3,538	3,345	3,950	3,485	4,425	3,815	4,775	3,850
Soc. Romana di Elettricità	...	...	...	...	...	...	...	...	4,710	3,980
Soc. Telefonica Tirrena - Serie A	2,780	2,445	2,675	2,490	2,920	2,595	3,630	2,800	4,710	3,980
Soc. Telefonica Tirrena - Serie B									4,255	3,480
Italcable	3,060	3,515	2,960	3,370	3,070	3,950	3,960	4,680	4,950	4,150
Foodstuffs										
Eridania - Zuccherifici Nazionali	15,130	13,150	16,900	13,940	20,025	16,830	22,870	19,450	25,700	21,450
Soc. Italiana Industria Zuccheri	3,300	6,825	6,490	8,200	8,500	9,525	9,400	10,650	11,700	10,175
Chemicals										
Montecatini	997	903	931	870	1,091	922	1,205	1,081	1,353	1,190
A.N.I.C. - Azienda Naz. Idr. Combustibili	202	181	182	153	170	157	180	155	166	133
Società Italiana per il Gas	26	22	24	23	24	21	...	...	...	...
Sundry										
Soc. Gen. Immobiliare	370	320	358	313	454	350	550	435	567	458
Istituto Romano dei Beni Stabili	5,300	4.435	5,570	4,605	7,450	5,430	8,800	6,980	10,030	7,875
Pirelli Soc. per Azioni	1,068	982	987	910	1,225	925	1,395	1,205	1,512	1,327
Italcementi	7,285	6,470	7,545	6,720	9,770	7,460	10,900	8,970	12,200	10,100
Cartiere Burgo	6,850	6,380	6,400	5,640	7,500	6,320	8,970	6,640	10,000	8,530

Source: *Bollettino Mensile di Statistica.*

Table R

CAPITALISATION INDEXES OF SOME ITALIAN COMPANIES QUOTED ON STOCK EXCHANGE (*)
(capital value of 1 lira invested in 1938)

Companies	Lire									
	December 1951	March 1952	June 1952	August-Septem. 1952	October 1952	November 1952	December 1952	January 1953	February 1953	March 1953
Financial and Insurance										
Strade Ferrate Meridionali (Bastogi)	21.49	23.44	20.59	22.69	23.74	27.50	27.05	29.00	30.66	27.65
S.T.E.T. Soc. Torinese Esercizi Telefonici	13.07	15.55	15.94	16.44	16.44	19.55	19.44	31.40	20.16	19.33
La Centrale	18.85	20.63	21.06	24.47	27.88	31.44	33.45	36.60	39.89	36.08
Pirelli & C.	22.73	23.95	26.40	31.77	33.49	37.88	38.37	46.44	43.02	35.68
Assicurazioni Generali	21.78	28.43	27.00	29.16	31.25	43.22	39.90	47.78	46.55	42.56
Riunione Adriatica di Sicurtà	12.78	25.15	25.83	33.31	33.04	42.76	36.03	40.65	41.46	38.07
Textiles										
Snia Viscosa	31.38	32.01	24.07	20.16	20.80	21.43	18.90	19.91	20.54	18.02
Chatillon Soc. It. Fibre Tessili Art.	46.21	44.13	43.98	33.91	38.71	42.12	38.25	37.94	37.78	35.61
Linificio e Canapificio Nazionale	31.40	28.89	26.27	27.63	28.38	32.30	28.99	26.37	25.87	23.51
Cotonificio Vittorio Olcese	54.24	52.83	41.53	39.55	40.68	49.44	42.38	46.76	43.22	35.31
Cucirini Cantoni Coats	40.26	46.46	53.09	68.69	69.68	79.44	84.62	92.58	99.55	96.40
Cotonificio Cantoni	79.78	89.68	93.40	108.02	117.93	128.33	119.91	127.84	127.84	115.95
Lanificio Rossi	38.72	38.72	44.37	42.60	43.24	50.98	46.14	48.40	48.40	49.05
Manifattura Lane di Borgosesia	46.52	45.62	41.47	47.88	50.89	53.91	53.53	59.94	55.98	53.16
Minerals, Metals and Engineering										
Monte Amiata	17.66	24.92	23.35	28.26	31.20	35.91	35.32	38.07	36.89	37.28
Stabilimento Minerario del Siele	21.94	28.49	26.64	34.19	34.90	40.71	38.46	43.65	45.58	42.73
Ilva Alti Forni e Acciaierie d'Italia	3.59	5.95	4.77	5.68	6.18	5.78	5.81	6.05	5.41	4.81
Dalmine	109.07	150.59	144.07	172.84	182.40	177.62	167.37	182.40	168.06	150.29
Terni	5.46	8.17	5.95	6.10	6.84	6.94	6.55	6.99	6.35	6.20
F.I.A.T.	17.74	18.77	16.71	18.11	20.98	21.71	22.08	23.48	22.82	22.45
Ansaldo	0.08	0.14	0.11	0.10	0.11	0.11	0.10	0.11	0.10	0.09
Bianchi Edoardo	13.22	14.74	13.22	13.44	15.77	15.39	14.95	15.39	15.17	14.95
Public Utilities										
Soc. Edison	22.44	24.05	24.13	25.26	25.45	27.49	28.74	32.47	29.59	30.07
C.I.E.L.I.	15.43	17.70	18.60	20.54	19.98	21.52	22.33	23.96	22.49	21.24
Soc. Adriatica di Elettricità	10.43	12.24	12.36	12.24	12.36	13.18	13.56	14.69	14.47	14.71
S.I.P. Soc. Idroelettrica Piemonte	12.02	13.18	12.63	13.36	14.05	14.87	15.02	17.29	16.32	14.91
Soc. Meridionale di Elettricità	10.08	11.57	11.37	12.09	12.14	12.98	13.75	14.18	14.75	13.90
Soc. Elettrica Selt - Valdarno	12.35	14.53	14.44	15.77	15.77	16.68	17.18	18.68	18.26	15.98
Soc. Romana di Elettricità	18.28	21.54	21.54	23.14	53,26	24.67	25.23	27.38	27.07	24.61
Soc. Telefonica Tirrena	15.31	17.09	16.52	18.18	18.11	20.41	21.43	25.26	25.51	23.22
Italcable	45.61	51.01	45.61	58.52	63.32	68.72	65.27	72.32	69.02	63.02
Foodstuffs										
Eridania - Zuccherifici Naz.	37.65	42.90	47.86	56.62	58.37	64.20	62.45	72.37	70.04	65.95
Soc. Italiana Industria Zuccheri	37.22	44.75	53.46	61.25	64.68	68.64	66.40	75.77	74.84	70.88
Chemicals										
Montecatini	13.44	13.81	13.99	15.93	17.45	17.45	18.03	19.57	19.12	17.91
A.N.I.C. - Az. Naz. Idr. Combustibili	5.77	5.77	4.95	5.27	5.39	5.58	5.14	5.01	4.44	4.76
Soc. Ital. per il Gas	10.11	10.55	10.55	10.11	12.22	12.22	12.71	13.20	12.12	. .
Sundry										
Soc. Gen. Immobiliare	16.72	18.52	17.89	22.96	23.07	25.93	27.09	28.47	27.52	25.08
Ist. Romano Beni Stabili	20.57	23.56	23.46	33.65	33.37	37.45	37.68	42.42	42.42	40.76
Pirelli Soc. per Azioni	22.51	23.95	22.51	27.50	29.12	30.74	30.27	33.42	33.51	31.80
Italcementi	58.64	64.46	66.95	85.64	84.72	96.69	92.64	110.51	110.51	102.40
Cartiere Burgo	60.98	67.08	61.80	68.10	75.21	89.44	85.89	97.57	92.70	92.49

(*) The index of capitalisation represents the capital value, at the end of a given period, of one lira invested in January, 1938, and it is obtained by the following formula: $It = Pt\ Nt / Po\ No$, in which Pt = the price, at the time t, of the security in question; Nt = the number of shares held at the time t by a shareholder owning No shares at « O » time, purchased at the price Po, who has on each occasion reinvested the value (at the price on the first day of option) of his bonus or cash shares in the same security, as well as any repayments of capital and other proceeds accrueing to him from the ownership of the said shares, dividends excluded.

Source: *Bollettino* of the Central Institute of Statistics.

ITALY'S NATIONAL PRODUCT AND WHOLESALE PRICES: 1901–1951 **Table 5**

Year	Net national product				Index numbers, 1913 = 100				Wholesale prices 1913 = 1
	Total (Millions of lire)		Pro-capite (Lire)		Net national product at factor cost		Net national product at market prices		
	At factor cost	At market prices	At factor cost	At market prices	Total	Pro-capite	Total	Pro-capite	
1901	13,913	15,011	428	461	67	72	66	72	0.84
02	12,155	13,278	372	406	58	63	59	63	0.81
03	14,111	15,243	430	464	68	72	67	72	0.81
04	13,307	14,451	403	438	64	68	64	68	0.77
05	13,611	14,831	410	447	65	69	66	70	0.80
1906	13,553	14,855	407	446	65	69	66	69	0.83
07	17,719	19,010	529	567	85	89	84	88	0.90
08	15,642	16,971	463	502	75	78	75	78	0.87
09	18,096	19,533	531	573	87	89	86	89	0.88
10	16,943	18,474	493	537	81	83	82	84	0.88
1911	19,259	20,865	555	601	92	93	92	94	0.95
12	19,601	21,279	560	608	94	94	94	95	1.03
13	20,896	22,614	594	643	100	100	100	100	1.00
14	19,934	21,549	558	603	95	94	95	94	0.96
15	20,198	21,962	555	603	97	93	97	94	1.27
1916	28,307	30,624	772	836	136	130	135	130	1.85
17	39,423	42,421	1,080	1,162	189	182	188	181	2.74
18	54,717	58,489	1,516	1,620	262	255	259	252	4.13
19	57,514	62,342	1,605	1,740	275	270	276	271	4.50
20	82,148	88,845	2,284	2,470	393	385	393	384	5.91
1921	83,024	91,945	2,241	2,482	397	377	407	386	5.41
22	90,443	100,935	2,368	2,642	433	399	446	411	5.45
23	104,895	116,329	2,724	3,021	502	459	514	470	5.50
24	111,936	124,338	2,886	3,206	536	486	550	499	5.47
25	132,869	146,787	3,397	3,753	636	572	649	584	6.13
1926	144,451	159,403	3,661	4,039	691	616	705	628	6.25
27	120,328	134,931	3,022	3,389	576	509	597	527	5.26
28	119,678	133,833	2,977	3,329	573	501	592	518	5.08
29	122,866	136,756	3,030	3,373	588	510	605	525	4.85
30	104,704	118,873	2,561	2,907	501	431	526	452	4.34
1931	88,357	102,778	2,142	2,492	423	361	455	388	3.79
32	90,193	103,934	2,169	2,499	432	365	460	389	3.54
33	81,714	95,526	1,949	2,278	391	328	422	354	3.22
34	80,359	94,303	1,901	2,231	385	320	417	347	3.15
35	90,148	104,248	2,115	2,445	431	356	461	380	3.46
1936	91,890	106,896	2,139	2,488	440	360	473	387	3.88
37	111,204	127,740	2,570	2,952	532	433	565	459	4.53
38	117,230	135,630	2,689	3,111	561	453	600	484	4.84
39	128,150	149,348	2,911	3,393	613	490	660	528	5.05
40	145,860	169,326	3,280	3,808	698	552	749	592	5.89
1941	159,150	185,159	3,550	4,130	762	598	819	642	6.57
42	174,957	205,042	3,879	4,547	837	653	907	707	7.39
43	245,770	276,144	5,425	6,096	1,176	913	1,221	948	11.08
44	858,413	892,286	18,885	19,631	4,108	3,179	3,946	3,053	41.54
45	1,553,666	1,633,439	34,064	35,813	7,435	5,735	7,223	5,570	99.71
1946	2,502,000	2,719,000	54,493	59,219	11,974	9,174	12,024	9,210	139.61
47	4,954,000	5,420,000	108,088	118,255	23,708	18,197	23,968	18,391	249.75
48	5,645,000	6,387,000	123,507	139,741	27,015	20,792	28,244	21,733	263.50
49	5,935,000	6,853,000	129,033	148,991	28,403	21,723	30,304	23,171	250.23
50	6,370,000	7,427,000	137,640	160,480	30,484	23,172	32,843	24,958	237.06
1951	7,423,000	8,646,000	157,474	183,419	35,524	26,511	38,233	28,525	270.18

Source: *Annuario statistico italiano, 1952.*